



Medium Term Plan for HNB Summer 1 – Wriggle and Crawl

English/Maths NB This plan is only for English and Maths covered by the topic.	Science	Geography	Art & DT	Computing		
<p>Week 1 Engage 5 days</p>	<p>Memorable Experience: Visit a local woodland, grassland, heathland, fen or wetland to observe and identify minibeasts in their natural habitat. Before the trip, talk to the children about what they might expect to see and encourage them to come up with questions about different minibeasts and the environments they live in. Give them dental mirrors so they can take a sneaky peek into holes and crevices and nets to sweep beneath the surface of ponds and puddles, then lift stones and logs and clear away leaf litter to see what they can find. Collect specimens using pooters, spoons and nets, then observe the creatures closely using magnifying pots, hand lenses and digital microscopes. Ask them to listen to an expert describe how the environment supports the animals that live there, and ask questions to improve their knowledge. Finally, the children should use recording sheets, digital photography and video footage to record their experience. They can also draw the minibeasts and make notes on how they move, the creatures they were found with and other observations. Make sure the children return all minibeasts to their natural habitat.</p> <p>Spoken Language Explain a task or experience, structuring talk so that the main points are clear. Look back at photos and video footage to remember and describe things they saw and did during their visit. Describe the minibeasts they found and explain how they identified them using keys or images. Describe where they found different minibeasts and how their location helps them survive. Write an alphabetical</p>	<p>Science Define the terms ‘habitat’ and ‘micro-habitat’, giving examples and identifying animals that live in each place.</p> <p>Explore small trees and bushes in their local environment to discover what’s hiding in them. Work in groups to hold a white cotton sheet under a bush or small tree. Shake the tree or bush over the white sheet and work quickly to catch minibeasts with spoons, pooters and fingers! Use simple classification (identification) keys or pictures to identify species found and create a tally chart to record the different types and frequency. Back in the classroom, transfer their data to a simple data handling program, calculating the total number of each creature found in the sample area. Use the information to produce a computer-generated or hand-drawn pictogram or block graph.</p> <p>Science Identify the basic needs of animals and humans for survival, including good nutrition and regular exercise.</p> <p>Think about the creatures they have seen and explain what they think minibeasts need to survive. Complete a table or annotate pictures of the minibeasts with information under the following headings: What do I eat and drink? How do I breathe? What do I live</p>	<p>Geography Draw simple maps or plans using symbols for a key. Make a simple sketch map of the area where they carried out their minibeast hunt. Talk about the physical and human features that they saw, using geographical vocabulary. Add a key to indicate features on their sketch maps and plot the route they took around the site. Identify stopping points or sampling areas along the route.</p>	<p>Art & Design Use line and tone to draw shape, pattern and texture.</p> <p>Draw detailed sketches of collected minibeasts using pen or pencil. Use a hand lens or digital microscope to look closely at each specimen collected, making careful line drawings of their observed features.</p>	<p>Computing Write and test simple programs. Go on a ‘programmed’ minibeast hunt! Working in teams, take it in turns to ‘program’ a member of their team to reach and collect numbered minibeasts. If their instructions are correct, they collect the minibeast and the team then ‘programs’ the next person to reach the next minibeast. If their instructions are incorrect the opposing team gets a chance to ‘debug’ the instructions and have a go at collecting the minibeast. The team with the most minibeasts at the end of the game wins.</p>	

	<p>list of all the minibeasts they found.</p> <p>Writing Draw pictures and note down ideas, key words and new vocabulary in a simple planning format. Work as a class to compile a list of dos and don'ts for a successful minibeast hunt. Work in pairs to add further points, including symbols or illustrations using clip art.</p> <p>Writing Re-read to check for sense, correct use of verbs and errors in spelling, grammar and punctuation (e.g. ends of sentences punctuated accurately). Discuss what other information they might need to include, then work independently to complete their own guidebook. Check that sentences and paragraphs make sense and that words are spelt correctly. Use dictionaries and spell check tools for help. Include their own photos or images downloaded from the web to illustrate their guides.</p>	<p>in/under? How do I protect myself?</p>				
<p>Week 2- Develop Instructions</p>	<p>Reading Use age-appropriate dictionaries or thesauri to find the meaning of new words, with adult/peer support.</p> <p>Read and discuss written instructions on how to make a range of habitats for keeping minibeasts in the classroom. Identify the features of the instructions to make a features checklist. Work in pairs to look up words that they are unsure of or don't understand in a dictionary.</p>	<p>Science Suggest ideas, ask simple questions and know that they can be answered/investigated in</p>			<p>Computing Understand what algorithms are, how they are implemented as programs on digital devices, and that programs execute by following a sequence of instructions.</p> <p>Rewrite Eric Carle's 'The Very Hungry Caterpillar' as an algorithm! Think carefully about the different steps the caterpillar goes through, including which ones repeat and draw a flow diagram to illustrate the story. Read the whole story again to check that the 'algorithm' is correct and there are no gaps or jumps.</p>	<p>Mathematics Identify and describe the properties of 2-D shapes, including the number of sides and symmetry in a vertical line (e.g. quadrilaterals and polygons).</p> <p>Identify lines of symmetry in minibeasts by studying images of butterflies, dragonflies, worms, snails, woodlice and ladybirds. Use digital software to make symmetrical patterns out of a range of 2-D shapes, then design their own symmetrical butterfly.</p>

	<p>Reading Ask questions and make comments, based on textual cues.</p> <p>Use a range of information sources, including non-fiction books, to find out how to care for and meet the needs of the minibeasts they will be making habitats for. Work with a partner to ask questions that arise from the texts, making a note of these and discussing them with an adult or answering them themselves by further reading.</p> <p>Writing Make vocabulary and style choices appropriate to the purpose of the writing, ensuring the main features are included.</p> <p>Revisit their instructions with a writing partner to check spelling, grammar and punctuation, making corrections where necessary. Word process their instructions and add illustrations using images from the web or by creating their own with drawing or painting software. Print their instructions and display them next to the minibeast habitats.</p> <p>Writing Plan the content and structure of each sentence orally before writing (including simple conjunctions and adjectives).</p> <p>Use their imaginations to write creative instructions on how to be a particular minibeast! Draft out their ideas using their observations as a starting point. Aim to tell the reader how to behave.</p>	<p>different ways including simple secondary sources, such as books and video clips.</p> <p>Create a minibeast home to enable them to keep, observe and care for a range of minibeasts. Collect specimens from the local area, including snails, spiders, worms and slugs. Look closely at the minibeasts using a digital microscope or hand lens. Devise a range of questions that can be arranged into the following categories: those that can be answered by immediate observation ('Are the spiders alive?'), those that need further observation or research ('Can worms climb?') and those that may require a test ('What is a slug's favourite food?').</p> <p>Science Do things in the correct order when performing a simple test and begin to recognise when something is unfair.</p> <p>Investigate how far, how fast and in which direction snails move! Look under and in dark, damp places to find snails and collect them in plastic tubs. Use small dots of nail varnish to colour code the snails' shells, making sure it doesn't touch their soft, fleshy body. Record information about each snail, including its size, species (such as <i>Helix aspersa</i> or <i>Helix lucorum</i>) and any other notable features. Release the snails from a single location in the playground then try and find them again the following morning. Mark where each one was found on a paper or digital map of the playground and work out which snail travelled the greatest distance, including any differences between</p>			<p>Refine the algorithm until they are certain it works.</p>	
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		<p>species. Make a note of any snails that they couldn't find.</p> <p>Science Use simple scientific language to explain what they have found out.</p> <p>Investigate which fruits butterflies prefer to eat. Make a range of butterfly foods using ripe fruit mixed with water and sugar. Place the fruit in a shallow bowl in a sunny area that butterflies typically visit. Take it in turns to watch the bowls and record any butterflies (or other minibeasts) that visit, using a tally chart. Find out what animals eat butterflies, such as birds, toads and dragonflies, then learn about the creatures that, in turn, eat those animals. Construct a food chain to show what they have discovered.</p>				
<p>Week 3-Develop Reviews and information books</p>	<p>Reading Predict what might happen next using evidence from the text.</p> <p>Visit the local library to find stories about minibeasts, such as 'Aaaarrgghh, Spider!' by Lydia Monks, 'The Very Greedy Bee' by Steve Smallman, and 'The Very Hungry Caterpillar', 'The Bad-Tempered Ladybird' and 'The Very Busy Spider' all by Eric Carle. Predict what might happen at different points in the stories during reading.</p> <p>Writing Talk through the content of what they are going to write about, considering the sequence of sentences.</p> <p>Choose a favourite book about minibeasts and tell a partner what they like about it. Write a simple book review, explaining</p>	<p>Science Suggest ideas, ask simple questions and know that they can be answered/investigated in different ways including simple secondary sources, such as books and video clips.</p> <p>Find out why and how bees make honey. Look at video footage and images of bees using their proboscis to collect nectar from flowers. See how they get covered in pollen as they feed. Identify parts of the flower that the bee collects pollen and nectar from. Draw a diagram and label it with captions to explain how bees make honey.</p> <p>Science Describe the life cycles of some common animals and humans.</p> <p>Learn about the life cycle of a honey bee or bumblebee,</p>		<p>D&T Explain where the food they eat comes from (e.g. by referring to countries, counties, animals and plants).</p> <p>Observe, smell and taste raw honeycomb and a range of local honey in different flavours. Discuss the taste of each honey and decide which one they prefer. Draw a picture of the honeycomb, focusing on the shape and size of its individual 'cells'. Use the honey to make delicious baked treats including honey flapjack, honey-baked bananas and honey buns.</p>	<p>Computing Recognise common uses of ICT beyond school.</p> <p>Watch live webcam footage of bees in a bee colony as they come and go from the hive and perform their duties. Look closely at the bees returning to the hive to see if some appear different to others. Pick out bees that have full pollen baskets on their legs and observe their different colours, which change depending on where they have foraged. See how bees communicate in and around the hive and watch footage of the waggle dance they perform to tell other worker bees the direction and distance of flowers that contain lots of pollen and nectar.</p> <p>Computing Write and test simple programs.</p>	

	<p>what the story is about, who the characters are and why they enjoyed it so much. Give their book a ‘star rating’, depending on how much they enjoyed it.</p> <p>Writing Make vocabulary and style choices appropriate to the purpose of the writing, ensuring the main features are included.</p> <p>Read a range of information books to find out about bees. Look at examples of different pages, thinking about how they are organised and what features have been used. Use correct terminology when describing headings, sub-headings, a contents page, index, diagrams, captions and pictures. Begin to think how they would organise a mini information book all about bees and jot down ideas, drawings and plans, sharing their ideas with an adult.</p> <p>Writing Evaluate their own writing with the teacher and their peers, identifying the main strengths and an area for improvement.</p> <p>Continue working on their bee books using a variety of sources to collect relevant and interesting information and to check facts. Work with a partner to read through their developing work, making any edits and changes as necessary. Add illustrations, photos and captions on paper or digitally to create a finished book.</p>	<p>including their egg, larval, pupal, and adult stages. Draw the bee’s life cycle in a diagrammatic form and label accordingly, adding short captions to explain each stage.</p>			<p>Program a ‘bee’ to leave its hive and visit a number of different-coloured flowers and a water source in a sequence outlined by a provided algorithm. Write down the instructions they gave the bee when it was successful. Make sure the instructions are written in a way that will allow other people to repeat the bee’s journey.</p>	
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Spoken Language
 Ask questions to clarify understanding and learn new vocabulary.

Play the guessing game, ‘Who am I?’. Think about a minibeast, but don’t tell the rest of the group its name. Give ‘yes’ or ‘no’ answers to their questions as they try to work out what minibeast it could be. Provide no more detail – the only answer allowed is ‘yes’ or ‘no’.

Reading
 Note effective language choices and show skill in discussing their favourite words and phrases (e.g. ‘slimy is a good word’).

Read and listen to traditional poems and rhymes about minibeasts, such as ‘There’s a Worm at the Bottom of My Garden’, ‘Caterpillar, Caterpillar’ by C. Richard Miles and ‘Hurt No Living Thing’ by Christina Rossetti. Talk about the poems and rhymes, spot any rhyming words and describe the imagery that they create. Identify favourite words and phrases in each poem and explain why they like them.

Writing
 Plan the content and structure of each sentence orally before writing (including simple conjunctions and adjectives).

Work together to create a class poem about minibeasts using rhyming words to create simple couplets. Read their class poem together and suggest ways it could be improved, such as by adding ‘wow’ words, adjectives, adverbs and alliteration.

Science
 Suggest ideas, ask simple questions and know that they can be answered/investigated in different ways of enquiry including simple secondary sources, such as books and video clips.

Find out how a minibeast’s appearance can help it avoid being eaten. Look at a range of camouflaged creatures, such as the peppered moth, stick insect and shield bug. Describe their camouflage and compare them with butterflies, ladybirds, wasps and hornets, which have bright colours and patterns. Think about how these creatures avoid being eaten.

Science
 Name and match animals to their offspring.

Match pictures of baby and adult minibeasts, including ladybirds, worms, earwigs, moths, woodlice and spiders. Group the animals according to whether or not the babies look like their parents. Find out more about the life cycle of their favourite minibeast. Think about why minibeasts have such different life cycles.

Geography

Art & Design
 Choose appropriate materials and techniques for a given project.

Make an army of ants! Work alone to create an ant out of pipe cleaners and half the base of an egg box. Use pipe cleaners for the ant’s legs and antennae, attaching them to the correct body part. Paint the ant brown and display it with others to make a class ant army!

Computing
 Organise, store, manipulate and retrieve data in a range of digital formats.

Use stop motion animation software, such as I Can Animate, to make their ants march like an army across the classroom carpet or a table. Come up with ideas and suggestions for the animation by watching videos of ants working together. Create a background for the ants to ‘march’ in front of and add to the challenge with a gap that the ants must cross.

Computing
 Use logical reasoning to predict the behaviour of simple programs.

Look at a diagram of the life cycle of a familiar minibeast with key elements missing. Use logical reasoning to predict the missing steps in the life cycle. Complete the life cycle by including the correct elements. Share the edited life cycle in small groups correcting (debugging) any errors. Draw a new diagram of the entire life cycle of a similar minibeast.

	<p>Writing Read aloud their own writing clearly, audibly and with appropriate intonation.</p> <p>Work in pairs to write a poem about one or more minibeasts. Use a writing frame to help structure the poem, or write a free verse poem that doesn't have to rhyme. Perform the poem for the class using appropriate intonation, actions or sound effects.</p>					
<p>Week</p>						
<p>Innovate Week 5</p>	<p>Working in groups, choose a favourite minibeast studied during the project. It could be a butterfly, honey bee, woodlouse, fly or ladybird. Check what your group knows about its life cycle.</p>	<p>Show your favourite minibeast's life cycle as a flow diagram. Make sure there are no errors in it! Of course, you could always debug it if it has!</p>	<p>Make models of each stage of your minibeast's life cycle. Use soft modelling dough or draw the stages on card and cut them out. If your chosen minibeast is a butterfly, you'll need to make or draw a butterfly, an egg, a caterpillar and a pupa. What kind of background do you want for your animation? Why not take a look in books or online for ideas?</p>	<p>Watch as your teacher demonstrates how to use the animation software. Practise using it before you get started on your animations. Find out what onion-skinning is and make sure you use it when doing your animations! Set up your work area. Secure your background with masking tape and make sure your models are all ready. Watch your animations back as you work. Great... you've finished your animation.</p>	<p>Does your animation show the minibeast's full life cycle in the right order?' With help, save your animation, then export it as a movie file. Import your movie file into editing software, such as Movie Maker. Watch as your teacher shows you how to use the 'edit movie' tool to add a title to your animation. Use the 'edit movie' tool to add credits to your animation. You could add sound effects or narration to your film. Why not write a poem to use as a soundtrack?</p>	<p>Save your animation as a project file as you work. When you have finished, save it as a movie! Watch another groups' animation and write a review about it – give it a star rating! Email your movies to Dr Fran. CONGRATULATIONS! You have completed your Innovation Challenge.</p>
<p>Express Week 6-Writing for different purposes.</p>	<p>Spoken Language Sustain attention in purposeful conversations and stay on-topic.</p> <p>Discuss ideas for improving their local environment to attract wildlife. Make a list of suggestions that they could put into action to attract more minibeasts. Compare ideas with the class and come up with a plan of action!</p> <p>Spoken Language Explain a task or experience,</p>	<p>PE Perform movements to express ideas, emotions or feelings and repeat dance phrases.</p> <p>Move like a minibeast! Use their knowledge of how minibeasts move to practise wriggling, stretching and crawling like caterpillars and worms. Climb like spiders, slide like snails, or do the bee's waggle dance! Practise making spirals like the patterns on a snail's shell, moving clockwise.</p>	<p>PSHE Talk about what they are good at and things that they find difficult.</p> <p>Hold an event to screen their animation produced during the Innovate Stage. Send out invites, put on their best outfits and pose for a picture on the red carpet. Sit back and enjoy the show.</p>	<p>D&T Choose appropriate materials and suggest ways of manipulating them to achieve a desired effect.</p> <p>Use their knowledge of camouflage and warning colours to design and make a 3-D model of a minibeast. Collect and use natural materials, such as leaves, twigs and bark, and a range of craft materials, including googly eyes, pipe cleaners and coloured pom-poms. Place their creature</p>	<p>Computing Organise, store, manipulate and retrieve data in a range of digital formats.</p> <p>Use suitable software to create a slide about a favourite aspect of the project for a school assembly. Insert photos of minibeasts, their habitats, artwork and links to computing activities from earlier in the project, including videos and animations. Think about the information and skills they have learnt and any new things</p>	<p>Music Describe how an instrument has been used to represent a sound or object (e.g. a flute for a bird or a drum for thunder).</p> <p>Add tuned and percussion sounds to a class poem, or other poems studied in the Develop Stage of the project, for dramatic effect. Discuss appropriate instruments that could be used for representing different minibeasts.</p>

	<p>structuring talk so that the main points are clear. Share work from the project with parents and carers and talk about what they have learnt, using scientific language. Name and describe the main characteristics of their favourite minibeast. Explain how they have acted as entomologists during the project. Ask parents and carers to write a comment in a scientist's book or on a comment wall.</p> <p>Writing Make vocabulary and style choices appropriate to the purpose of the writing, ensuring the main features are included.</p> <p>Reflect on what they have learnt about common wildlife and how to care for it. Discuss whether their opinions on creatures, such as spiders, slugs and worms, have changed. Write a pledge about how they will care for and promote wildlife, particularly minibeasts in their local habitat.</p> <p>Writing Make vocabulary and style choices appropriate to the purpose of the writing, ensuring the main features are included.</p> <p>Plan a special assembly on the theme of 'Wriggle and Crawl'. Work together to think about what it should include and allocate different roles within the group. Work independently or in pairs on a small spoken piece, poster, poetry reading or demonstration. Practise reading their work in preparation for the performance.</p> <p>Spoken Language Speak clearly with appropriate intonation, varying talk to capture and hold the listeners' attention.</p>			<p>outside in their 'natural habitat' and take photos with a digital camera.</p>	<p>they'd like to learn in the future.</p>	
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	<p>Present their special assembly, speaking confidently and clearly to an audience. Be prepared to answer questions. Plan an activity that parents and carers can join in with, such as a rhyme, song or poem.</p>					
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