



Holy Trinity Church of England Academy
Termly Plan: Wriggle and Crawl
Year Group: 2

Focus + Area of Curriculum e.g. Engage, Develop, Express Innovate	Objectives	Activity and lesson outline	Differentiation	Resources/ Key Questions	Next Steps/ Necessary Skills
<p>Engage</p> <p>Computing</p>	<p>To be able to create and debug simple programs</p>	<p>Set out a 'map' using masking tape or hoops containing images of different minibeasts. The children must create a simple 'program' to guide a human beebot to collect the minibeast pictures.</p> <p>Use beebot cards to create the program first, then test and debug it. Work as a whole class initially to create and debug the program to ensure children understand the different instructions and how to 'debug' the programme.</p> <p>If children are secure split into two teams, Team 1 writes a program to collect a minibeast, if they are correct they can keep it, if not the opposite team can 'debug' the program and get the minibeast for themselves.</p>	<p>Children to work as a whole class, then in mixed ability large groups to introduce the key vocabulary etc.</p>	<p><u>Resources</u> Hoops or masking tape to create the 'map' bee bot cards Cards with images of minibeasts (or toy minibeasts to collect)</p> <p><u>Key Questions</u> How can you get from the start to the bee? Which direction will you need to turn in? How many steps forward? Why did our program not work? How can we 'debug' it?</p>	
<p>Engage</p> <p>Computing</p>	<p>To be able to create and debug simple programs</p>	<p>Remind the children about programming human beebots to collect minibeasts and explain that today we are going to be recording our programs.</p> <p>Show the children a simple map on the board and ask them to write a program to get a</p>	<p>SEN: give a simpler map and initially work together to create the program before recording individually</p> <p>LAPs: simpler map, encourage children to</p>	<p><u>Resources</u> Beebot style maps beebot cards</p> <p><u>Key Questions</u> How can you get from the start to the bee?</p>	<p>The children will continue to develop these skills in their computing lessons (see</p>



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		<p>'beebot' or other robot to collect the minibeasts from a given start point.</p> <p>Model how to record the program and allow children to test it and identify any debugging they may need to do.</p>	<p>record program on whiteboard and test it first.</p> <p>MAPs/HAPs: use a slightly more complex map to challenge children (include obstacles to go around.</p>	<p>Which direction will you need to turn in? How many steps forward? Why did our program not work? How can we 'debug' it?</p>	<p>computing MTP)</p>
<p>Engage/ Develop</p> <p>Art and Design</p>	<p>Use line and tone to draw shape, pattern and texture.</p> <p>To be able to explore the different lines and tones I can make with my pencil.</p>	<p>Use sketching pencils and demonstrate to children some of the drawing techniques they can use – practise drawing lines of different thicknesses, crosshatching, shading, making dots etc with sketching pencils. Allow children some time to practise these and discuss making areas darker by going over them again rather than pressing harder.</p> <p>Look at a simple image of a minibeast and model using some of these techniques to sketch and shade the minibeast.</p> <p>Allow the children to experiment and attempt some simple sketches.</p>	<p>Support children as needed. Allow children to select from a few minibeasts for their first sketch based on confidence levels.</p>	<p><u>Resources</u> images of minibeasts sketching pencils rubbers</p> <p><u>Key Questions</u> What shapes can you see? Which parts of the minibeast are darkest? Which parts are lightest? How can you show the texture on the minibeast? How can you show how hairy its antenna are?</p>	<p>Move on to sketch minibeasts on a larger scale</p>



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<p>Engage/ Develop</p> <p>Art and Design</p>	<p>Use line and tone to draw shape, pattern and texture.</p> <p>Experiment with tone using pencil</p> <p>To be able to use line and tone to sketch a minibeast</p>	<p>Recap the drawing skills from the previous lesson.</p> <p>Look at some illustrations of minibeasts (cornerstones resource) and discuss which drawing techniques have been used for them.</p> <p>Use these skills to draw detailed sketches of minibeasts using pencil. Use a hand lens or digital microscope to look closely at the minibeasts and look at images too.</p> <p>Encourage children to draw the minibeasts larger than life to allow for detailed sketches and recap drawing lightly at first, then going over lines when they are happy with the size.</p> <p>Also model dividing up the page to help with the sizing first.</p>	<p>Children to select a minibeast to sketch based on their own levels of confidence.</p> <p>Support children as needed when sketching, drawing attention to details.</p>	<p><u>Resources</u> images of minibeasts sketching pencils rubbers</p> <p><u>Key Questions</u> What shapes can you see? Which parts of the minibeast are darkest? Which parts are lightest? How can you show the texture on the minibeast? How can you show how hairy its antenna are?</p>	
<p>Engage/ Develop</p> <p>Art and Design</p>	<p>To be able to investigate colour and shade.</p>	<p>Recap the sketching techniques we have learned and introduce the children to oil pastels.</p> <p>Give them a few minutes to experiment with them, looking at how we can use similar techniques to our sketching pencils to achieve different effects with the oil pastels.</p> <p>move on to looking at shading with the pastels, what happens if we go back over an area? What if we use two colours? Do they mix to make a new colour? What if we add black or white?</p>	<p>Support children as needed when exploring the oil pastels.</p> <p>Use this lesson to help assess who may need more support/ a simpler minibeast in the next lesson</p>	<p><u>Resources</u> images of minibeasts oil pastels paper divided into sections</p> <p><u>Key Questions</u> What happens if you use cross hatching? What happened if you press lightly? How can you get more than one shade of colour from your oil pastel?</p>	



Holy Trinity Church of England Academy
Termly Plan: Wriggle and Crawl
Year Group: 2

		Give the children a sheet of paper divided into sections to explore these different techniques.			
Engage/ Develop	<p>To represent things observed using colour in 2 dimensions</p> <p>To be able to use line and colour to create a minibeast picture.</p>	<p>Look again at the skills we learned when sketching our minibeasts. Explain that today we are going to be sketching our minibeasts and colouring them using oil pastels.</p> <p>Model lightly sketching the minibeast first, drawing attention to the fact that if I press lightly any errors will be easy to rub out/ will be hidden when colour is added.</p> <p>Model using oil pastels to colour the minibeast, testing colours on a separate sheet of paper first. Recap shading techniques to use on different parts of the minibeast.</p>	<p>Children to select a minibeast to sketch based on their own levels of confidence.</p> <p>Support children as needed when sketching and colouring, drawing attention to details.</p>	<p><u>Resources</u> images of minibeasts sketching pencils rubbers oil pastels</p> <p><u>Key Questions</u> What shapes can you see? Which parts of the minibeast are darkest? Which parts are lightest? How can you show the texture on the minibeast? How can you show how hairy its antenna are? Which colours will you need?</p>	
Develop	<p>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>To be able to create minibeast homes and observe minibeasts.</p>	<p>Create a minibeast home to enable the children 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.</p> <p>As a class 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</p>	<p>Children to work in mixed ability groups to create their minibeast homes</p> <p>SEN: sup with recording questions (scribe if needed) LAPs: suggest questions MAPs/HAPs: organise questions into categories</p>	<p><u>Resources</u> minibeasts e.g. worms, ants etc. jars, soil, gravel, leaves spoons, lollypop sticks transparent containers with lids</p> <p><u>Key Questions</u> Where do we need to keep the minibeasts? How can we make sure they are well looked after?</p>	



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		<p>that may require a test ('What is a slug's favourite food?').</p> <p>Take pictures of children making the minibeast homes for topic books and put alongside the questions they wish to answer.</p> <p>Note You can find creatures outside or buy more unusual minibeasts such as mealworms and locusts from pet and reptile shops.</p> <p>Set up an observation log for children to record their observations over the next few weeks.</p>		<p>What will we need to do to help the minibeasts to have enough food?</p>	
<p>Develop</p> <p>English/ Science</p>	<p>To be able to write an information text about a minibeast.</p> <p>To be able to use subheadings to organise facts</p>	<p>Using English skills, recap the main features of a non-chronological report.</p> <p>Identify appropriate headings and subheadings for a non-chron about the minibeasts we have made homes for.</p> <p>Model writing a simple non-chron about a minibeast, using subheadings and facts suggested by the children. Identify any key vocabulary we should be using.</p> <p>Children to use facts they know from Science, English lessons and any further research to create a simple non-chron about one of the minibeasts we are studying in class.</p>	<p>SEN: all complete the same minibeast, writing frame and shared writing LAPs: provide with a writing frame with subheadings and some key facts MAPs: provide with key vocab/facts HAPs: complete independently.</p>	<p><u>Resources</u> information about the minibeasts (ipads, fact files, books etc) Writing frames</p> <p><u>Key Questions</u> Which subheadings could we use? What do these minibeasts eat? Where might they be found? What does this minibeast look like?</p>	



Holy Trinity Church of England Academy
Termly Plan: Wriggle and Crawl
Year Group: 2

<p>Develop</p> <p>Mathematics Art and Design</p>	<p>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>Represent things observed using colour.</p> <p>To be able to use painting and printing to create an image of a butterfly.</p>	<p>Look at some minibeasts and identify symmetry in them. Look at images of butterflies, dragonflies, snails etc. Discuss the symmetrical patterns, shapes and colours.</p> <p>Look at some further examples of butterflies and discuss the symmetrical patterns and shapes.</p> <p>Demonstrate to the children how we can create our own symmetrical butterflies by painting one half and then folding the paper in half.</p> <p>Draw attention to the fact that the paint needs to be wet and so we need to work quickly.</p> <p>Allow the children to choose from a range of real butterflies to try to replicate, looking closely at the colours and patterns they have on them.</p> <p>Children to sketch their design first, then paint one half and fold over the paper to print the other half of the design.</p> <p>Note: this lesson may need to run alongside another lesson to allow children to have support with printing or other children may need to be sketching other symmetrical minibeasts.</p>	<p>Children to select a butterfly to copy based on their confidence levels. Encourage children who find art more challenging to choose a simpler butterfly e.g. a common blue and challenge children who are more able in art to choose a more complex butterfly e.g. a painted lady</p>	<p><u>Resources</u> images of butterflies to copy paint and paintbrushes thick paper (pre-folded)</p> <p><u>Key Questions</u> Which colours can you see on this butterfly? What does symmetrical mean? What shapes can you see on its wings? What do you notice about the shape of the wings?</p>	
<p>Develop</p> <p>Mathematics</p>	<p>Identify and describe the properties of 2-D shapes, including the number of sides and symmetry in a vertical</p>	<p>Look at 2simple 2paint.</p> <p>Show the children the symmetry tool.</p>	<p>Children to complete this task at their own level.</p>	<p><u>Resources</u> ICT suite Images of butterflies</p> <p><u>Key Questions</u></p>	



Holy Trinity Church of England Academy
Termly Plan: Wriggle and Crawl
Year Group: 2

<p>Art and Design Computing</p>	<p>line (e.g. quadrilaterals and polygons).</p> <p>Use technology purposefully to create digital content.</p> <p>Use technology purposefully to create, store, manipulate and retrieve digital data.</p> <p>To be able to use digital software to create a symmetrical image of a butterfly.</p>	<p>explain that we can use this tool to create butterfly images, similar to the ones we have created with paint.</p> <p>Demonstrate the tool and allow the children to experiment with how using other tools such as pen tool and splash tool create different effects.</p> <p>children to create their own symmetrical butterfly pictures and save on Nessy Drive</p> <p>Note: Stick images of this and of the paint butterflies from previous lesson in topic books and ask children to write simple sentences comparing them/ saying which they prefer and why.</p>	<p>Support children as needed to complete a simple butterfly shape.</p>	<p>Which tools will help us to create designs like a butterfly? How can we change the colour of our designs? Which tools are most effective?</p> <p>Which method of making a butterfly picture did you like best? Which method was easiest? Why?</p>	
<p>Engage/ Develop</p> <p>Science</p> <p>Memorable Experience</p>	<p>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>To find out about how bees make honey</p>	<p>If possible invite a local bee keeper in to talk to the children about their job Children to find out about beekeeping, honey production and the life cycle of a bee</p>		<p>Resources Bee keeper camera</p>	
<p>Develop</p> <p>Computing English</p>	<p>Recognise common uses of computing outside of 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</p>	<p>SEN: writing frame and shared writing LAPs: provide with a writing frame with subheadings and some key facts</p>	<p><u>Resources</u> information about bees (ipads, fact files, books etc) Writing frames</p>	



Holy Trinity Church of England Academy
Termly Plan: Wriggle and Crawl
Year Group: 2

		<p>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>https://explore.org/livecams/honey-bees/honey-bee-landing-zone-cam</p> <p>Use the information from this lesson and the beekeeper visit to write information texts about bees, drawing on skills from English lessons on non-chronological reports.</p>	<p>MAPs: provide with key vocab/facts HAPs: complete independently.</p>	<p>images from visit and possibly screen shots from webcams.</p> <p><u>Key Questions</u> Which subheadings could we use? What is the lifecycle of a bee like?</p> <p>How do bees make honey?</p>	
<p>Develop</p> <p>Design and Technology</p>	<p>Explain where the food they eat comes from (e.g. by referring to countries, counties, animals and plants).</p> <p>Understand that all food has to be grown, farmed or caught</p> <p>Evaluate existing products.</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</p> <p>Children to record 'tasting notes' for each of the different honeys they try and identify which they prefer to use in a honey recipe next lesson.</p>	<p>SEN: simpler table to record preferences. Provide with words to choose from and give marks out of 10</p> <p>LAPs: complete simple form identifying the flavours they can taste in different honeys.</p> <p>MAPs/HAPs: complete tables more interpedently.</p>	<p><u>Resources</u> Different types of honey, spoons tables to record tasting notes.</p> <p><u>Key Questions</u> What does this honey look like? What colour is it? How runny is it? What does it taste like? Which honey was the sweetest? Which one did you like best? Why?</p>	<p>Remember to buy the chosen honey and other ingredients for the next lesson.</p>
<p>Develop</p> <p>Design and Technology</p>	<p>Use cookery techniques to prepare food safely.</p> <p>Choose appropriate tools and equipment.</p>	<p>Work in small groups to make honey and lemon cupcakes (recipe on Cornerstones)</p> <p>Discuss which equipment we will need, how to stay safe in the kitchen and what we will need to do to make sure we are being hygienic.</p>	<p>children work in small mixed ability groups to make the cupcakes under close adult supervision.</p>	<p><u>Resources</u> Use of kitchen butter, caster sugar, honey, lemon icing sugar, flour, .</p> <p><u>Key Questions</u></p>	<p>Take photographs of each stage to use in next lesson</p>



Holy Trinity Church of England Academy
Termly Plan: Wriggle and Crawl
Year Group: 2

				Which equipment will we need? how will we know how much flour to use? What do we need to do to stay safe in the kitchen?	
Develop Design and Technology English	Use cookery techniques to prepare food safely. Choose appropriate tools and equipment. To be able to write a set of instructions. To be able to use bossy verbs	Look at images from previous lesson and sequence them. Explain we are going to see these to help us to write instructions to make the cakes again. Identify features of instructions – numbers, subheadings, bossy verbs (based on previous work in English) Model writing the instructions, drawing attention to the bossy verbs used. Children to use the images to help them to write their own set of instructions.	SEN: Writing frame with an image for each instruction to support. LAPs: provide with examples of bossy verbs and a writing frame MAPs: provide with examples of bossy verbs HAPs: encourage use of time words too.	<u>Resources</u> images of process of making the cakes writing frames <u>Key Questions</u> What subheadings will we need? Which bossy verbs will we need? What is the bossy verb in this sentence? What did we do first?	
Develop Memorable Experience		Go on a minibeast hunt at Gibside. Explore the different habitats and which minibeasts are found in different locations. Provide children with simple maps or plans for them to mark on where different minibeasts were found.			Keep maps of where minibeasts were found for next lesson
Develop Geography	To be able to draw a simple map and use symbols for a key.	Recap some of the map symbols used in our previous unit – Land Ahoy. Look at sample sketch map from Cornerstones resources and discuss how we can make a similar one showing where we found minibeasts. Make a simple sketch map of the area where they carried out their minibeast hunt. Talk	SEN: provide with a simple outline map and key to support LAPs: Give some symbols on key to support MAPs/HAPs: complete own maps and keys,	<u>Resources</u> maps from trip <u>Key Questions</u> What is a key? Which human and physical features did we see? Where did we find most of the minibeasts?	



Holy Trinity Church of England Academy
Termly Plan: Wriggle and Crawl
Year Group: 2

		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.	using symbols and sketch maps from visit to help.		
Develop Geography	To be able to draw a simple map and use symbols for a key. (NB: This may require two sessions, one to complete minibeast hunt and one to complete map)	Compete a minibeast hunt around the school grounds and mark on a simple map of the school where different minibeasts were found. Recap making a map of our minibeast hunt on our visit and make one of the school grounds. 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.	SEN: provide with a simple outline map and key to support LAPs: Give some symbols on key to support MAPs/HAPs: complete own maps and keys, using symbols and sketch maps from school grounds to help	<u>Resources</u> map of school grounds <u>Key Questions</u> What is a key? Which human and physical features did we see? Where did we find most of the minibeasts?	
Develop Art and 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! Note The three dimples of the egg box represent the ant's head, thorax and abdomen. An ant's legs are attached to its central thorax. To attach the ant's legs, either punch holes	Children to work independently to create their ants, with support from adults as needed. Provide a range of tools and equipment and allow children to choose the most appropriate to make their ants	<u>Resources</u> egg boxes pipe cleaners paint masking tape hole punch <u>Key Questions</u> What colour should our ants be? How could we attach the legs? Which part of the body should the legs be attached to?	Keep the ants for the next lesson.



Holy Trinity Church of England Academy
Termly Plan: Wriggle and Crawl
Year Group: 2

		and thread pipe cleaners through the body or attach them to the bottom with masking tape.			
Develop Computing	Organise, store, manipulate and retrieve data in a range of digital formats. To be able to save work and edit it.	Show the children video of ants marching and working as a team from Youtube or National Geographic Explain that we are going to use our ants to create an animation of the ants working together. 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. Use a camera or iPad on a tripod to film the animation.	Children to work together to 'film' the ants and discuss how we can move them from scene to scene. Encourage children to work as a team and identify strengths of their classmates to help them succeed as a class.	<u>Resources</u> Egg box ants from previous lesson camera or ipad tripod stop motion software. <u>Key Questions</u> What task could our ants complete? How can they help each other? What do we need to do after each movement? How can we piece the film together?	
Innovate Science Art and Design	To be able to identify the life cycle of a minibeast To be able to create models To represent things observed in 3 dimensions Experiment with basic tools on different materials	Show children the letter from Dr Fran asking them to make animations of the different life cycles of minibeasts. Divide the children into groups and allow them to choose a minibeast, find out about its lifecycle using ipads and books and then ask them to create models of each stage. these will be used next lesson to create their animations.	Children to work in mixed ability groups. use assessment of previous work to identify children who are confident with technology and children who are good artists and try to ensure there is at least one of each in each group	<u>Resources</u> ipads, books and factsheets about minibeast life cycles. equipment for making models e.g. plasticine, pipe cleaners, card etc. <u>Key Questions</u> What are the stages for your mini beasts life cycle? How could you make a model of	Keep models and backgrounds safe for next lesson.



Holy Trinity Church of England Academy
Termly Plan: Wriggle and Crawl
Year Group: 2

	To design and make 3d models to represent the stages in a lifecycle of a minibeast.			each stage? What will your model need to include? What backgrounds will you need?	
Innovate Computing	To be able to use technology to create, store and edit digital content.	Using animation software, children to film their lifecycles using the 3d models they have made. Work in small groups to complete the animations, using techniques such as onion skinning if appropriate Save the files and export to a programme such as movie maker to add a title and credits. Save work.	Children to work in mixed ability groups and support each other	<u>Resources</u> ICT suite cameras/ipads minibeast models and backgrounds from previous lesson animation software <u>Key Questions</u> Which stage of the life cycle will you need first? How can you transition between each stage?	
Express English/ Computing	To be able to create digital content using appropriate software To be able to create invitations and programmes	Explain to the class that we are going to hold a screening of their animations to show them to their parents. We will need invitations so that they know to come and a programme to decide which order the different films will be shown in. Agree on a running order as a class and children to use 2Simple software to create simple invitations and programs. Encourage them to create images using the skills they have learnt in previous sessions and/or insert images of their work from their animations as appropriate	children to compete programmes and invitations on computer Support with spelling if needed. Provide SEN with text pre-typed so they can focus on the format of their work.	<u>Resources</u> ICT suite 2simple software <u>Key Questions</u> what order will we show our films in? What time is our event? Where should we hold it? What other information do we need to include? How should we arrange our information?	



Holy Trinity Church of England Academy
Termly Plan: Wriggle and Crawl
Year Group: 2

Express PSHE	To be able to talk about what I am good at and what I find difficult To be able to share and evaluate my work.	Invite parents to watch the animations the children have made. Provide refreshments and ask the children to introduce their animations.	Children to work as a class	<u>Resources</u> printed programmes screen to show films on Possibly use hall and microphones or in classroom	
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