

Cockfield Primary School: Computing Long Term Plan

Our Curriculum Intent:

Through teaching computing, we equip our children to participate in a rapidly changing world where work and leisure activities are increasingly transformed by technology. It is our intention to provide children with a wealth of learning opportunities, explicitly within computing and also across other curriculum subjects. We intend to provide children with the opportunities to find, explore, analyse, exchange and present information in a safe and effective way. The National Curriculum defines three clear aspects of computing: Computer Science, Information Technology and digital Literacy. Children will be given the opportunity to develop their knowledge and understanding in each of these areas.

	Key Stage 1	Lower Key Stage 2	Upper Key Stage 2
Computer Science	<ul style="list-style-type: none">• Know which button on a Bee Bot represents which action• Know how to program a Bee Bot to follow a simple sequence of instructions (1-2 Turns, 6-7 Turns)• Make a simple sequence of instructions/algorithm• Be able to make simple predictions about and algorithm and a	<ul style="list-style-type: none">• Be able to use Scratch to make a simple programme using sequencing, inputs, outputs and timing• Be able to describe how their program works• Inputs sets of instructions according to programming language and environment• Use repeat loops for instance to create a program to draw regular 2D shapes on Scratch	<ul style="list-style-type: none">• Use customisation to change a working program to change its appearance for instance- changing a sprite or background• Uses loops to achieve goals in Scratch• Uses variables, conditional sentences, external triggers and loops in Scratch to achieve set goals.• Use Mathematical expressions when constructing conditionals- if loops >5 then

	<p>program (The Bee Bot will go.....)</p> <ul style="list-style-type: none"> • Be able to change (debug) the program to improve the outcome • Begin to use a block programming- Alex and Scratch Junior 	<ul style="list-style-type: none"> • Independently debug mistakes • Begin to use conditionals- If I click here, this will happen • Know how to break sets of instructions into short steps to achieve a set goal 	<ul style="list-style-type: none"> • Be able to reliably modify existing algorithms and code to change the effect of the program
<p>Information Technology</p>	<ul style="list-style-type: none"> • To be able to log onto a computer • To be able to navigate around the screen with a mouse or touchpad • Know how to type text using the space bar for separate words to create something meaningful • Be able to format text, and add a picture • Be able to independently find and use an app on a tablet (Take a photo or a video) • Be able to retrieve and print work from a computer or an iPad 	<ul style="list-style-type: none"> • Be able to log onto a computer system as themselves and can find their documents • Know how to open shared documents and pictures • Know how to use Publisher or Pages to create a simple poster or brochure • Know how to sequence and add slides to make a simple presentation on PowerPoint • Create a meaningful document that contains both pictures and text • Be able to organize their personal folder effectively • Know how to change font size and style; including shapes and backgrounds and to use the Spellcheck function 	<ul style="list-style-type: none"> • To be able to share their work from their personal folder to work collaboratively with others • Know how to use software to create an effective poster or leaflet • Be able to select the best program for the task • Using software know how to add data into a prepared spreadsheet to answer simple questions- Excel • Independently, prepare an effective presentation in PowerPoint to show their learning to others, which includes some elements of timing or sequence. • Know how to edit a picture on Paint.net • Know how to create a simple formula on Excel to work out

		<ul style="list-style-type: none"> • Be able to deliver a simple presentation to their peers. 	<p>given mathematical tasks such as adding a set of numbers</p> <ul style="list-style-type: none"> • To be able to use two or more programmes to create a final piece of work.
<p>Digital Literacy</p>	<ul style="list-style-type: none"> • Know that the internet is accessed all over the World and know that some devices are connected to the internet • Know that they should always ask a responsible adult if they want to use a device and ask for help if they see anything that worries them • With support from an adult, be able to find information on the internet • Know what personal information is and that they should never share it with anyone they don't know • To use the search engine Swiggle with support 	<ul style="list-style-type: none"> • Know that some people using the internet should not be trusted • Know that concerns about what they see online should be reported to a trusted adult • Create and use a simple password • Use a search engine to find information given key words • Know which websites are useful and begin to understand that not all of them might be trustworthy • Be able to log in out of websites used at school • Know that having a balance of online and offline activities is important • Know what the key words are to enter into a search engine to find information they want 	<ul style="list-style-type: none"> • Know the risks posed to them by using Social Media, including understanding that people may not be who they say they are • Know that it is irresponsible to share images of friends online without their permission • Know that a balance of online and offline activities is important to maintain good health • Know how to report concerns online • Effectively use a search engine to find multiple criteria using and/or to refine searches • Know how to compare information from different websites and know that some sites might be bias. • Know how to reduce the risks posed by Social Media by managing their friends list

			<ul style="list-style-type: none">• Know that it is illegal to post rude pictures of children• Know that search result can be influenced by sponsorship and advertising• Know that some news is fake
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