Computing Framework - Milestone 3

Intent
• Competence in coding for a variety of practical and inventive purposes, including the application of ideas within other subjects. • The ability to connect with others safely and respectfully, understanding the need to act within the law and with moral and ethical integrity are vital life skills which run throughout the curriculum and not just in discrete computing lessons. • An understanding of the connected nature of devices. • The ability to communicate ideas well by using applications and devices throughout the curriculum. • The ability to collect, organise and manipulate data effectively. • Children will use a range of applications, operating systems and devices to help become proficient, safe, responsible and creative users of technology, software and online systems.

Threshold Concepts	Skills	
Code This concept involves developing an understanding of instructions, logic and sequences.	Motion	• To set IF conditions for movements. Specify types of rotation giving the number of degrees.
	Looks	• To change the position of objects between screen layers (send to back, bring to front).
	Sound	• To upload sounds from a file and edit them. Add effects such as fade in and out and control their implementation.
	Draw	• To use a wider variety of control tools for effect
	Events	• To set events to control other events by 'broadcasting' information as a trigger.
	Control	• To use IF THEN ELSE conditions to control events or objects.
	Sensing	• To use a range of sensing tools (including proximity, user inputs, loudness and mouse position) to control events or actions.
	Variables and lists	• To use lists to create a set of variables.

	Operators	• To ue the Boolean operators () < () () = () () > () ()and() ()or() Not() to define conditions. • To use the Reporter operators () + () () - () () * () () / () to perform calculations. Pick Random () to () Join () () Letter () of () Length of () () Mod () This reports the remainder after a division calculation Round () () of ().
	Other experiences	• To use a range of coding and computing skills to make own content
Connect This concept involves developing an understanding of how to		• To collaborate with others online on sites approved and moderated by teachers • To understand how simple networks are set up and used • To understand more of the dangers online, how to minimise risks and report problems

safely connect with others.		• To understand about legal and illegal downloads • To know what a positive digital footprint is and how to maintain one • To know how to be a 'critical consumer' online • To understand the effects of cyberbullying • To know how to respect yourself and others online
Communicate This concept involves using apps to communicate one's ideas.		• To be able to choose the most suitable application or device for the purpose of communication • To use many advanced features in software in order to create high quality, professional or efficient communications • To create presentations with range of links, images and sounds • To manipulate images To design own webpage • To undertake film making; including scripting, roles, rehearsal, evaluation, quality of shots, appropriateness of sound, saving to different media.
Collect This concept involves developing an understanding of databases and their uses.		• To select appropriate applications to devise, construct and manipulate data and present it in an effective and professional manner including using spreadsheets (using formulae), databases and graphing tools • To collect live data using data-logging equipment identifying data errors, patterns and sequences