

Whole School Curriculum Overview - Computing

		Milestone 1 (Year 1 & 2)	Milestone 2 (Year 3 & 4)	Milestone 3 (Year 5 & 6)
To code (using Scratch)	Motion	Control motion by specifying the number of steps to travel, direction and turn.	Use specified screen coordinates to control movements.	Set IF coordinates for movement. Specify types of rotation giving the number of degrees.
	Looks	Add text strings, show and hide objects and change the features of an object.	Set the appearance of objects and create sequences of changes.	Change the position of objects between screen layers (send to back, bring to front).
	Sound	Select sounds and control when they are heard, their duration and volume.	Create and edit sounds. Control when they are heard, their volume, duration and rests.	Upload sounds from a file and edit them. Add effects such as fade in and out and control their implementation.
	Draw	Control when drawings appear and set the pen colour, size and shape.	Control the shade of pens.	Combine the use of pens with movement to create interesting effects.
	Events	Specify user inputs (such as clicks) to control events.	Specific conditions to trigger events.	Set events to control other events by ‘broadcasting’ information as a trigger.
	Control	Specify the nature of events (such as a single event or a loop).	Use IF THEN conditions to control events or objects.	Use IF THEN ELSE conditions to control events or objects.
	Sensing	Create conditions for actions by waiting for a user input (such as responses to questions like; What is your name?).	Create conditions for actions by sensing proximity or by waiting for a user input (such as proximity to a specified colour or a lone or responses to questions).	Use a range of sensing tools (including proximity, user inputs, loudness and mouse position) to control events or actions.
	Variables & lists		Use variables to store a value.	Use a list to create a set of variables.
			Use the functions define, set, change, show and hide to control the variables.	
	Operators		Use the Reporter operators () + () () – () () * () () / () to perform calculations.	Use the Boolean operators () < () () = () () > () () and () () or () Not () to define conditions. Use the Reporter operators () + () () – () () * () () / () to perform operations. Pick random () to () Join () () Letter () of () Length of () () Mod () <i>This reports to remainder after a division calculation.</i> Round () () of ()
To connect	Participate in class social media accounts.		Contribute to blogs that are moderated by teachers.	Collaborate with others online on sites approved of and moderated by teachers.
	Understand online risks and the age rules for sites.		Gove examples of the risks posed by online communications.	Gove examples of the risks of online communities and demonstrate knowledge of how to minimise risk and report problems.
			Understand the term ‘copyright’.	Understand and demonstrate knowledge that it is illegal to download copyrighted material, including music or games, without express permission from the copyright holder.
			Understand that comments made online that are hurtful or offensive are the same as bullying.	Understand the effect of online comments and show responsibility and sensitivity when online.
			Understand how online services work.	Understand how simple networks are set up and used.
To communicate	Use a range of applications and devices in order to communicate ideas, work and messages		Use some of the advanced features of applications and devices in order to communicate ideas, work or messages professionally.	Choose the most suitable applications and devices for the purposes of communication.
				Use many of the advanced features in order to create high quality, professional or efficient communications.
To collect	Use simple databases to record information in areas across the curriculum.		Devise and construct databases using applications designed for this purpose in areas across the curriculum.	Select appropriate applications to devise, construct and manipulate data and present it in an effective and professional manner.