The following progression of skills are used for the teaching of computing in Key Stage 1 and Key Stage 2.

	Milestones 1	Milestone 2	Milestone 3
To Code (Using programmes such as Scratch)			
Motion	• Control motion by specifying the number of steps to travel, direction and turn.	• Use specified screen coordinates to control movement.	• Set IF conditions for movements. 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.	• Specify 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 line or responses to questions).	• Use a range of sensing tools (including proximity, user inputs, loudness and mouse position) to control events or actions
Variables and lists	*From Year 3 onwards*	• Use variables to store a value.	• Use lists to create a set of variables.

		• Use the functions define, set, change, show and hide to control the variables.	
Operators	*From Year 3 onwards*	• Use the Reporter operators () + () () - () () * () () / () to perform calculations.	• Use the Boolean operators () < () () = () () > () ()and() ()or() Not() to define conditions. • 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 ().

To Connect	• Understand online risks and the age rules for sites.	• Understand how online services work. • Give examples of the risks of online communities and demonstrate knowledge of how to minimise risk and report problems.	• Contribute to class blogs that are moderated by teachers. • Understand that comments made online that are hurtful or offensive are the same as bullying. • Give examples of the risks posed by online communications. • Understand the term 'copyright'.	•Collaborate with class online using sites that are closed and moderated by teachers. • Understand how simple networks are set up and used.	• Understand and demonstrate knowledge that it is illegal to download copyrighted material, including music or games, without express written permission, from the copyright holder. • Understand the effect of online comments and show responsibility & sensitivity when online.

To Communicate	• Use applications and devices in order to communicate ideas and work.	• 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.	