Progression in Computing

Threshold Concept		Milestone 1 (By end of Y2)	Milestone 2 (By end of Y4)
Code This concept involves developing an understanding of instructions, logic and sequences.	Motion	• Control motion by specifying the number of steps to travel, direction and turn.	• Use specified screen coordinates to control movement.
	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.
	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.
	Draw	• Control when drawings appear and set the pen colour, size and shape.	• Control the shade of pens.
	Events	• Specify user inputs (such as clicks) to control events.	• Specify conditions to trigger events.
	Control	• Specify the nature of events (such as a single event or a loop).	• Use IF THEN 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).
	Variables and lists	• From Year 3 onwards.	• Use variables to store a value. • 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.
Connect This concept involves developing an understanding of how to safely connect with others.		• Participate in class social media accounts. • Understand online risks and the age rules for sites.	• Contribute to blogs that are moderated by teachers. • Give examples of the risks posed by online communications. • Understand the term 'copyright'. • Understand that comments made online that are hurtful or offensive are the same as bullying. • Understand how online services work.
Communicate This concept involves using apps to communicate one's ideas.		• 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.
Collect This concept involves developing an understanding of databases and their uses.		• 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.