



Our Lady of Victories Primary School

Computing Key Learning Milestones

Threshold Concept	MILESTONE 1	
	The expected standard for students by the end of Year 2	
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.
	Looks	Add text strings, show and hide objects and change the features of an object.
	Sound	Select sounds and control when they are heard, their duration and volume.
	Draw	Control when drawings appear and set the pen colour, size and shape.
	Events	<i>Specify user inputs (such as clicks) to control events.</i>
	Control	Specify the nature of events (such as a single event or a loop).
	Sensing	Create conditions for actions by waiting for a user input (such as responses to questions like: What is your name?).
Connect This concept involves developing an understanding of how to safely connect with others.	Understand online risks and the age rules for sites.	
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.	
Collect This concept involves developing an understanding of databases and their uses.	Use simple databases to record information in areas across the curriculum.	

Threshold Concept	<h2 style="text-align: center; background-color: red; color: black; padding: 5px;">MILESTONE 2</h2> <p style="text-align: center; background-color: red; color: black; padding: 2px;">The expected standard for students by the end of Year 4</p>	
<p>Code This concept involves developing an understanding of instructions, logic and sequences</p>	Motion	Use specified screen coordinates to control movement.
	Looks	Set the appearance of objects and create sequences of changes.
	Sound	Create and edit sounds. Control when they are heard, their volume, duration and rests.
	Draw	Control the shade of pens
	Events	Specify conditions to trigger events.
	Control	Use IF THEN conditions to control events or objects.
	Sensing	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	Use variables to store a value. Use the functions define, set, change, show and hide to control the variables.
	Operators	Use Reporter operators to perform calculations.
<p>Connect This concept involves developing an understanding of how to safely connect with others.</p>	<p>Begin to collaborate with others using Google apps (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.</p>	
<p>Communicate This concept involves using apps to communicate one's ideas.</p>	<p>Use some of the advanced features of applications and devices in order to communicate ideas, work or messages professionally.</p>	
<p>Collect This concept involves developing an understanding of databases and their uses.</p>	<p>Devise and construct databases using applications designed for this purpose in areas across the curriculum.</p>	

Threshold Concept	<h2 style="margin: 0;">MILESTONE 3</h2> <p style="margin: 0;">The expected standard for students by the end of Year 6</p>	
<p>Code This concept involves developing an understanding of instructions, logic and sequences</p>	Motion	Set IF conditions for movements. Specify types of rotation giving the number of degrees.
	Looks	Change the position of objects between screen layers (send to back, bring to front).
	Sound	Upload sounds from a file and edit them. Add effects such as fade in and out and control their implementation.
	Draw	Combine the use of pens with movement to create interesting effects.
	Events	Set events to control other events by 'broadcasting' information as a trigger.
	Control	Use IF THEN ELSE conditions to control events or objects.
	Sensing	Use a range of sensing tools (including proximity, user inputs, loudness and mouse position) to control events or actions
	Variables and Lists	Use lists to create a set of variables.
	Operators	Use Boolean operators to define conditions. Use the Reporter operators to perform calculations.
<p>Connect This concept involves developing an understanding of how to safely connect with others.</p>	<p>Confidently collaborate with others using Google apps (moderated by teachers).</p> <p>Give examples of the risks of online communities and demonstrate knowledge of how to minimise risk and report problems.</p> <p>Understand and demonstrate knowledge that it is illegal to download copyrighted material, including music or games, without express written permission, from the copyright holder.</p> <p>Understand the effect of online comments and show responsibility and sensitivity when online.</p> <p>Understand how simple networks are set up and used.</p>	
<p>Communicate This concept involves using apps to communicate one's ideas.</p>	<p>Choose the most suitable applications and devices for the purposes of communication.</p> <p>Use many of the advanced features in order to create high quality, professional or efficient communications</p>	
<p>Collect This concept involves developing an understanding of databases and their uses.</p>	<p>Select appropriate applications to devise, construct and manipulate data and present it in an effective and professional manner.</p>	