



# St. Joseph's Catholic Primary School Computing Overview



Key Concept		Phase 1 Y1 & Y2	Phase 2 Y3 & Y4	Phase 3 Y5 & Y6
<b>Code</b> This concept involves developing an understanding of instructions, logic and sequences.	Motion	<ul style="list-style-type: none"> <li>Control motion by specifying the number of steps to travel, direction and turn.</li> </ul>	<ul style="list-style-type: none"> <li>Use specified screen coordinates to control movement.</li> </ul>	<ul style="list-style-type: none"> <li>Set IF conditions for movements. Specify types of rotation giving the number of degrees.</li> </ul>
	Looks	<ul style="list-style-type: none"> <li>Add text strings, show and hide objects and change the features of an object.</li> </ul>	<ul style="list-style-type: none"> <li>Set the appearance of objects and create sequences of changes.</li> </ul>	<ul style="list-style-type: none"> <li>Change the position of objects between screen layers (send to back, bring to front).</li> </ul>
	Sound	<ul style="list-style-type: none"> <li>Select sounds and control when they are heard, their duration and volume.</li> </ul>	<ul style="list-style-type: none"> <li>Create and edit sounds. Control when they are heard, their volume, duration and rests.</li> </ul>	<ul style="list-style-type: none"> <li>Upload sounds from a file and edit them. Add effects such as fade in and out and control their implementation.</li> </ul>
	Draw	<ul style="list-style-type: none"> <li>Control when drawings appear and set the pen colour, size and shape.</li> </ul>	<ul style="list-style-type: none"> <li>Control the shade of pens.</li> </ul>	<ul style="list-style-type: none"> <li>Combine the use of pens with movement to create interesting effects.</li> </ul>
	Events	<ul style="list-style-type: none"> <li>Specify user inputs (such as clicks) to control events.</li> </ul>	<ul style="list-style-type: none"> <li>Specify conditions to trigger events.</li> </ul>	<ul style="list-style-type: none"> <li>Set events to control other events by 'broadcasting' information as a trigger.</li> </ul>
	Control	<ul style="list-style-type: none"> <li>Specify the nature of events (such as a single event or a loop).</li> </ul>	<ul style="list-style-type: none"> <li>Use IF THEN conditions to control events or objects.</li> </ul>	<ul style="list-style-type: none"> <li>Use IF THEN ELSE conditions to control events or objects.</li> </ul>
	Sensing	<ul style="list-style-type: none"> <li>Create conditions for actions by waiting for a user input (such as responses to</li> </ul>	<ul style="list-style-type: none"> <li>Create conditions for actions by sensing proximity or by waiting for a user input</li> </ul>	<ul style="list-style-type: none"> <li>Use a range of sensing tools (including proximity, user inputs, loudness and mouse position) to</li> </ul>

		questions like: What is your name?).	(such as proximity to a specified colour or a line or responses to questions).	control events or actions.
	Variables and lists	<ul style="list-style-type: none"> <li>From Year 3 onwards.</li> </ul>	<ul style="list-style-type: none"> <li>Use variables to store a value.</li> <li>Use the functions define, set, change, show and hide to control the variables.</li> </ul>	<ul style="list-style-type: none"> <li>Use lists to create a set of variables.</li> </ul>
	Operators	<ul style="list-style-type: none"> <li>From Year 3 onwards.</li> </ul>	<ul style="list-style-type: none"> <li>Use the Reporter operators  <math>() + ()</math>  <math>() - ()</math>  <math>() * ()</math>  <math>() / ()</math>  to perform calculations.</li> </ul>	<ul style="list-style-type: none"> <li>Use the Boolean operators  <math>() &lt; ()</math>  <math>() = ()</math>  <math>() &gt; ()</math>  <math>() \text{and} ()</math>  <math>() \text{or} ()</math>  Not()  to define conditions.</li> <li>Use the Reporter operators</li> </ul>

() + ()

() - ()

() \* ()

() / ()

to perform calculations.

Pick Random () to ()

Join () ()

Letter () of ()

Length of ()

() Mod () This reports the remainder

after a division calculation

Round ()

() of ().

<p><b>Connect</b> This concept involves developing an understanding of how to safely connect with others.</p>		<ul style="list-style-type: none"> <li>• Participate in class social media accounts.</li> <li>• Understand online risks and the age rules for sites.</li> </ul>	<ul style="list-style-type: none"> <li>• Contribute to blogs that are moderated by teachers.</li> <li>• Give examples of the risks posed by online communications.</li> <li>• Understand the term 'copyright'.</li> <li>• Understand that comments made online that are hurtful or offensive are the same as bullying.</li> <li>• Understand how online services work.</li> </ul>	<ul style="list-style-type: none"> <li>• Collaborate with others online on sites approved and moderated by teachers.</li> <li>• Give examples of the risks of online communities and demonstrate knowledge of how to minimise risk and report problems.</li> <li>• Understand and demonstrate knowledge that it is illegal to download copyrighted material, including music or games, without express written permission, from the copyright holder.</li> <li>• Understand the effect of online comments and show responsibility and sensitivity when online.</li> <li>• Understand how simple networks are set up and used.</li> </ul>
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<p><b>Communicate</b> This concept involves using apps to communicate one's ideas.</p>		<ul style="list-style-type: none"> <li>• Use a range of applications and devices in order to communicate ideas, work and messages.</li> </ul>	<ul style="list-style-type: none"> <li>• Use some of the advanced features of applications and devices in order to communicate ideas, work or messages professionally.</li> </ul>	<ul style="list-style-type: none"> <li>• Choose the most suitable applications and devices for the purposes of communication.</li> <li>• Use many of the advanced features in order to create high quality, professional or efficient communications.</li> </ul>
<p><b>Collect</b> This concept involves developing an understanding of databases and their uses.</p>		<ul style="list-style-type: none"> <li>• Use simple databases to record information in areas across the curriculum.</li> </ul>	<ul style="list-style-type: none"> <li>• Devise and construct databases using applications designed for this purpose in areas across the curriculum.</li> </ul>	<ul style="list-style-type: none"> <li>• Select appropriate applications to devise, construct and manipulate data and present it in an effective and professional manner.</li> </ul>