

Pattishall C of E School
Computing Long Term Plan

	Year 1			Year 2		
	Autumn	Spring	Summer	Autumn	Spring	Summer
Chris Quigley Objectives	<ul style="list-style-type: none"> Control motion by specifying the number of steps to travel, direction and turn. Add text strings, show and hide objects and change the features of an object. Participate in class social media accounts. Understand online risks and the age rules for sites. 	<ul style="list-style-type: none"> Select sounds and control when they are heard, their duration and volume. Specify the nature of events (such as a single event or a loop). Create conditions for actions by waiting for a user input (such as responses to questions like: What is your name?). 	<ul style="list-style-type: none"> Control when drawings appear and set the pen colour, size and shape. Use a range of applications and devices in order to communicate ideas, work and messages. Use simple databases to record information in areas across the curriculum. 	<ul style="list-style-type: none"> Control motion by specifying the number of steps to travel, direction and turn. Add text strings, show and hide objects and change the features of an object. Participate in class social media accounts. Understand online risks and the age rules for sites. 	<ul style="list-style-type: none"> Select sounds and control when they are heard, their duration and volume. Specify the nature of events (such as a single event or a loop). Create conditions for actions by waiting for a user input (such as responses to questions like: What is your name?). 	<ul style="list-style-type: none"> Control when drawings appear and set the pen colour, size and shape. Use a range of applications and devices in order to communicate ideas, work and messages. Use simple databases to record information in areas across the curriculum.
Computing Unit	<p>Twinkl online safety unit - learning how to be safe when using technology</p> <p>Beebots - learning how to programme</p>	<p>Twinkl computer skills unit - learning the basic skills for using a computer</p> <p>Twinkl word processing unit - learning to use</p>	<p>Twinkl computing painting - using computing skills to create art work</p> <p>Twinkl programming with Scratch Jr -</p>	<p>Twinkl online safety - learning how to be safe on technology</p> <p>Raspberry Pi Lost in space animation - moving a rocket, changing its size and</p>	<p>Raspberry Pi Rock Band - creating instruments, adding sound and layering music</p> <p>Raspberry Pi Ghostbusters -</p>	<p>Twinkl Computer Art unit - use computer skills to create art work</p> <p>Twinkl Presentation skills unit - present work and ideas</p>

	toys to move forwards, backwards and steps	word to type and create documents	learning basic skills of coding	making it hide	adding events and conditions for catching ghosts	using technology
Software/ Hardware Used	Beebots	Word	Scratch JR Paint	Scratch	Scratch	Raspberry Pi Powerpoint App

	Year 3			Year 4		
	Autumn	Spring	Summer	Autumn	Spring	Summer
Chris Quigley Objectives	<ul style="list-style-type: none"> 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. Use some of the advanced features 	<ul style="list-style-type: none"> Use specified screen coordinates to control movement. Control the shade of pens. Specify conditions to trigger events. Use the Reporter operators () + () () - () () * () () / () to perform calculations. 	<ul style="list-style-type: none"> Set the appearance of objects and create sequences of changes. Use IF THEN conditions to control events or objects. Create and edit sounds. Control when they are heard, their volume, duration and rests. Use variables to store a value. Use the functions define, set, change, show and hide to 	<ul style="list-style-type: none"> 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. Use some of the advanced features 	<ul style="list-style-type: none"> Use specified screen coordinates to control movement. Control the shade of pens. Specify conditions to trigger events. Use the Reporter operators () + () () - () () * () () / () to perform calculations. Devise and construct databases using applications 	<ul style="list-style-type: none"> Set the appearance of objects and create sequences of changes. Use IF THEN conditions to control events or objects. Create and edit sounds. Control when they are heard, their volume, duration and rests. Use variables to store a value. Use the functions define, set, change, show and hide to

	of applications and devices in order to communicate ideas, work or messages professionally.		control the variables.	of applications and devices in order to communicate ideas, work or messages professionally.	designed for this purpose in areas across the curriculum.	control the variables. • 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).
Computing Unit	Twinkl Online Safety Unit - learning how to stay safe when using technology Blogging - set up a class blog with the intention of adding to it throughout the year	Twinkl Drawing and Desktop Publishing - to draw objects, insert boxes and images. Sprint - Use arrow keys to get to the finish line as quickly as possible	Memory Game - creating a game in which you memorise and repeat random colour sequences Brain Game - create a maths quiz game in which the player has 30 seconds to give as many correct answers as possible.	Twinkl Online Safety Unit - learning how to stay safe when using technology Blogging - set up a class blog with the intention of adding to it throughout the year	Twinkl Programming Turtle - use coding to move the turtle around the screen using 'pen up' and 'down' to draw. Excel Spreadsheet - record information and publish it in an appropriate format	Dodgeball - create a platform game in which the player has to dodge moving balls to reach the end of the level. Open World - create your own adventure game world with multiple levels to explore.
Software/ Hardware Used	Primary Blogger	Paint Scratch	Scratch	Primary Blogger	Turtle Logo Excel	Scratch

	Year 5			Year 6		
	Autumn	Spring	Summer	Autumn	Spring	Summer
Chris Quigley Objectives	<ul style="list-style-type: none"> • Collaborate with others online on sites approved and moderated by teachers. • Give examples of the risks of online communities and demonstrate knowledge of how to minimise risk and report problems. • 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 and sensitivity when online. • Understand how simple networks are set up and used. • Choose the most suitable applications 	<ul style="list-style-type: none"> • Use the Boolean operators $() < ()$ $() = ()$ $() > ()$ $() \text{and} ()$ $() \text{or} ()$ $\text{Not} ()$ • Use IF THEN ELSE to define conditions. • Use the Reporter operators $() + ()$ $() - ()$ $() * ()$ $() / ()$ • to perform calculations. Pick Random $()$ to $()$ Join $()$ $()$ Letter $()$ of $()$ Length of $()$ $() \text{ Mod} ()$ This reports the remainder after a division calculation Round $()$ $()$ of $()$. • Use lists to create a set of variables. • Combine the use of pens with movement to create 	<ul style="list-style-type: none"> • Use a range of sensing tools (including proximity, user inputs, loudness and mouse position) to control events or actions. • Use IF THEN ELSE conditions to control events or objects. • Set events to control other events by 'broadcasting' information as a trigger. • Upload sounds from a file and edit them. Add effects such as fade in and out and control their implementation. 	<ul style="list-style-type: none"> • Collaborate with others online on sites approved and moderated by teachers. • Give examples of the risks of online communities and demonstrate knowledge of how to minimise risk and report problems. • 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 and sensitivity when online. • Understand how simple networks are set up and used. • Choose the most suitable applications and devices for the purposes of communication. 	<ul style="list-style-type: none"> • Use the Boolean operators $() < ()$ $() = ()$ $() > ()$ $() \text{and} ()$ $() \text{or} ()$ $\text{Not} ()$ • Use IF THEN ELSE to define conditions. • Use the Reporter operators $() + ()$ $() - ()$ $() * ()$ $() / ()$ • to perform calculations. Pick Random $()$ to $()$ Join $()$ $()$ Letter $()$ of $()$ Length of $()$ $() \text{ Mod} ()$ This reports the remainder after a division calculation Round $()$ $()$ of $()$. • Use lists to create a set of variables. • Combine the use of pens with movement to create interesting 	<ul style="list-style-type: none"> • Use a range of sensing tools (including proximity, user inputs, loudness and mouse position) to control events or actions. • Use IF THEN ELSE conditions to control events or objects. • Set events to control other events by 'broadcasting' information as a trigger. • Upload sounds from a file and edit them. Add effects such as fade in and out and control their implementation.

	<p>and devices for the purposes of communication.</p> <ul style="list-style-type: none"> • Use many of the advanced features in order to create high quality, professional or efficient communications. • Select appropriate applications to devise, construct and manipulate data and present it in an effective and professional manner. 	<p>interesting effects.</p> <ul style="list-style-type: none"> • Change the position of objects between screen layers (send to back, bring to front). • Set IF conditions for movements. Specify types of rotation giving the number of degrees. 		<ul style="list-style-type: none"> • Use many of the advanced features in order to create high quality, professional or efficient communications. • Select appropriate applications to devise, construct and manipulate data and present it in an effective and professional manner. 	<p>effects.</p> <ul style="list-style-type: none"> • Change the position of objects between screen layers (send to back, bring to front). • Set IF conditions for movements. Specify types of rotation giving the number of degrees. 	
Computing Unit	<p>Twinkl online safety unit - learn how to be safe when using technology</p> <p>Twinkl Internet Research and Webpage Design unit - comment on web page layout, create a new webpage and import pictures</p>	<p>2 Scratch Units from Raspberry Pi Code Club - control sprites using motion, controls, events and variables.</p>	<p>Twinkl Radio Station Unit - upload sound files to create a radio advert</p> <p>3D Modelling Raspberry Pi Blender Unit - use blender to create 3D models</p>	<p>Twinkl online safety unit - learn how to be safe when using technology</p> <p>Twinkl Spreadsheets - learn how to collect data and present it in a professional way</p>	<p>2 Scratch Units from Raspberry Pi Code Club - control sprites using motion, controls, events and variables.</p>	<p>Twinkl Film Making unit -</p> <p>Raspberry Pi Camera unit - use cameras and motion programming to set up wildlife cameras</p>
Software/ Hardware		Scratch	Blender Scratch	Excel Spreadsheets	Scratch	Raspberry Pi Cameras

Used						Python
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