Computing

Computing equips pupils to use computational thinking and creativity to understand and change the world. It helps to ensure children become digitally literate.

<table>
<tr><th></th><th>Reception</th><th colspan="2">Years 1 and 2</th></tr>
<tr><td>EYFS (Reception)/National Curriculum Objectives (Years 1 and 2)</td><td>• Children recognise that a range of technology is used in places such as homes and schools. They select and use technology for particular purposes.</td><td colspan="2">• Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions.
• Create and debug simple programs.
• Use logical reasoning to predict the behaviour of simple programs.
• Use technology purposefully to create, organise, store, manipulate and retrieve digital content.
• Recognise common uses of information technology beyond school.
• Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the Internet or other online technologies.</td></tr>
<tr><td>Cecil Gowing's curriculum coverage</td><td>Reception

• Children know to notify an adult if they are unsure about any computer event.
• Follow Smartie the Penguin's rules for being safe on line.
• Children understand the importance of using technology safely.
• Children with have the opportunity to use different modes of technology which will be constantly available to the children.
• Turning an iPad off and on/sliding to open.
• Turn on and off and give simple commands to robots such as Beebots.
• Can operate an online robot to perform simple movements.</td><td>Year 1

• Know to tell a trusted adult if they see something inappropriate.
• Know that some information (full name, address, birthday, etc) is 'special' as it applies to them.
• Children know that personal information is as valuable online as offline and that it should not be shared without an adult's permission.
• Children discuss, understand and abide by the school's e-Safety rules.
• Children understand the importance of talking to a trusted adult about online experiences.
• Develop familiarity with the iPad
• Select appropriate images.
• Add text to photographs, graphics</td><td>Year 2

• Children explore a range of age appropriate digital resources.
• Children to know that not everything they find online is accurate.
• Children to know what to do if they find something inappropriate online.
• Children discuss, understand and abide by the school's e-Safety rules.
• Children are aware that not everyone they meet online is automatically trustworthy.
• Children understand that personal information is unique to them and should not be shared without parent or teacher's permission.
• Children identify characteristics of people are worthy of their trust and can identify the signs of dangers</td></tr>
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	• Explore buttons when individual buttons are pressed on a robot.	and sound, e.g. captions and labelling. • Begin to explain reasons why choices have been made • Understand what an algorithm is. • Follow algorithms to move around a course. • Create a series of algorithms to move their peers around a course. • Predict what will happen when navigating around a course. • Explore an onscreen robot, e.g. ALEX, navigate it around a course or grid. • Have experiences of controlling other devices such as video recording equipment and digital cameras. • Perform simple tasks and commands on Beebots. • Find and repair a simple algorithm.	online. • Begin to word process short stories through digital books. • Develop basic editing skills including different presentational features. • Save, retrieve and amend their work. • Make use of graphics to enhance their text on screen. • Talk about their use of graphics and how it may alter the message begin given. • Use different layouts and templates for different purposes. • Use a search engine to research specific topics. • Talk about how everyday devices can be controlled. • Know that devices and actions on screen may be controlled by sequences of actions and instructions from a controller. • Create a sequence of instructions to control a programmable robot (such as a Beebot) to carry out a pre-determined route to include direction, distance and turn. • Use a program like ALEX to create a simple program of algorithms to perform actions. • Discuss how to improve/change their sequence of commands. • Find and repair (debug) the mistake in a sequence of algorithms.

Outdoor Learning Opportunities	*Activities such as…* Emergency services bike role play, climbing wall, habitats/maps, woodwork, treasure hunt, camp fire/cooking, gardening/maintenance, archery, woodland crowns, games in the woods, weather, art using natural materials, bug hunting and identification, mud kitchen potion making, bird feeders/watching, litter picking, pond dipping and den building.