Chestnuts PRIMARY SCHOOL

Inspiring Futures through Learning

Computing Progression Document

Computing Systems and Technology								
Curriculum Strand	Nursery	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
	To show increasing skill in technological tools with knobs, pulleys, buttons or in real objects e.g. cameras To use a mouse or touchscreen to operate simple games on a tablet or desktop computer, e.g. simple matching games To anticipate sounds, actions or lights when an adult demonstrates a cause-and-effect toy To attempt to touch or press buttons and flaps etc. on a range of cause-and-effect toys in order to make them work	To use a mouse or touchscreen to operate simple games on a tablet or desktop computer, e.g. simple matching games To recognise that a range of technology is used in places such as homes and school to select and use technology for particular purposes	To recognise technology in school and use it responsibly	To identify IT and how its responsible use improves our world in school and beyond	To identify that digital devices have inputs, processes and outputs To identify how devices can be connected to make networks	To recognise the internet as a network of networks including the WWW To recognise why we should evaluate online content	To recognise IT systems in the world and how some can enable searching on the internet	To explore how data is transferred by working collaboratively online
Creating Media								
Curriculum Strand	Nursery	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
	To show increasing skill in technological tools with knobs, pulleys, buttons or in real objects e.g. cameras	To share their creation on an iPad explaining the process they have used	To choose appropriate tools in a program to create art, and making comparisons with working non-digitally To use a computer to create and format text, before comparing to writing	To capture and change digital photographs for different purposes To use a computer as a tool to explore rhythms and melodies, before creating a musical composition	To capture and edit digital still images to produce a stop-frame animation that tells a story To create documents by modifying text, images, and page layouts for a specified purpose	To capture and edit audio to produce a podcast, ensuring that copyright is considered To manipulate digital images, and reflect on the impact of changes and whether the	To plan, capture and edit video to produce a short film To create images in a drawing program by using layers and groups of objects	To design and create webpages, giving consideration to copyright, aesthetics and navigation To plan, develop and evaluate 3D computer models of physical objects

			non-digitally			required purpose is fulfilled		
Programming								
Curriculum Strand	Nursery	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
	To explore the manipulative properties of objects to identify their use, sometimes with success, e.g. work out how to make the light work on an unfamiliar toy car	To explain to an adult how to turn on a torch, work a simple cause-and-effect toy, e.g. 'You press the button.' To manipulate simple technology for their own purpose, e.g. complete a simple programme on the computer	To write short algorithms and programs for floor robots, and predict program outcomes To design and programme the movement of a character on screen to tell stories	To create and debug programs, and use logical reasoning to make predictions To design algorithms and programs that use events to trigger sequences of code to make an interactive quiz	To create sequences in a block-based programming language to make music To write algorithms and programs that use a range of events to trigger sequences of actions	To use a text-based programming language to explore count-controlled loops when drawing shapes	To explore conditions and selections using a programmable microcontroller To explore selections in programming to design and code an interactive quiz	To explore variables when designing and coding a game To design and code a project that captures inputs from a physical device
Data and Information								
Curriculum Strand	Nursery	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
		To select appropriate applications that support an identified need, e.g. the quickest route to the supermarket	To explore object labels, then use them to sort and group objects by properties	To collect data in tally charts and use attributes to organise and present data on a computer	To build and use branching databases to group objects using yes/no questions	To recognise how and why data is collected over time, before using data loggers to carry out an investigation To use a block-based programming language to explore count-controlled and infinite loops when creating a game	To use a database to order data and create charts to answer questions	To answer questions by using spreadsheets to organise and calculate data