Brockenhurst Computing Long Term Plan

	Computing Systems and Networks	Creating Media A	Programming A	Data and Information	Creating Media B	Programming B
Year R *The children in Year R will revisit these activities regularly throughout the year as part of teacher led activities or continuous provision, linked to an area of learning.*		**Use the camera app** Organise open ended tasks that support active learning and builds understanding about what a digital image is.	**Role Play Area** Develop algorithmic thinking, where the children create or follow a sequence of steps that solves a problem.		**Drawing or painting app** To create an algorithm design that links to an EYFS area of learning.	**Building things – construction** Organising and sorting equipment– grouping items in a particular way based on set criteria.
Year 1	**Technology around us** Recognising technology in school and using it responsibly.	**Digital painting** Choosing appropriate tools in a program to create art, and making comparisons with working non-digitally.	**Moving a robot** Writing short algorithms and programs for floor robots, and predicting program outcomes.	**Grouping data** Exploring object labels, then using them to sort and group objects by properties.	**Digital writing** Using a computer to create and format text, before comparing to writing non-digitally.	**Programming animations** Designing and programming the movement of a character on screen to tell stories.
Year 2	**Information technology around us** Identifying IT and how its responsible use improves our	**Digital photography** Capturing and changing digital photographs for different purposes	**Robot algorithms** Creating and debugging programs, and using logical reasoning to make predictions.	**Pictograms** Collecting data in tally charts and using attributes to organise and present data on a computer.	**Digital music** Using a computer as a tool to explore rhythms and melodies, before creating a musical composition.	**Programming quizzes** Designing algorithms and programs that use events to trigger sequences of code

Any unit highlighted in grey covers how to use technology safely and respectfully within the lessons.

	world in school and beyond.					to make an interactive quiz.
Year 3	**Connecting computers** Identifying that digital devices have inputs, processes, and outputs, and how devices can be connected to make networks	**Stop-frame animation** Capturing and editing digital still images to produce a stop frame animation that tells a story	**Sequencing sounds** Creating sequences in a block-based programming language to make music.	**Branching databases** Building and using branching databases to group objects using yes/no questions.	**Desktop publishing** Creating documents and modifying text, images and page layouts for a specific purpose.	**Events and actions in programs** Writing algorithms and programs that use a range of events to trigger sequences of actions.
Year 4	**The internet** Recognising that the internet is a network of networks including the WWW, and why we should evaluate online content.	**Audio production** Capturing and editing audio to produce a podcast, ensuring that copyright is considered.	**Repetition in shapes** Using a text-based programming language to explore count-controlled loops when drawing shapes.	**Data logging** Recognising how and why data is collected over time, before using data loggers to carry out an investigation,	**Photo editing** Manipulating digital images, and reflecting on the impact of the changes and whether the required purpose is fulfilled.	**Repetition in games** Using a block-based programming language to explore count-controlled and infinite loops when creating a game.
Year 5	**Systems and searching** Recognising IT systems in the world and how some can enable searching on the internet.	**Video production** Planning, capturing, and editing video to produce a short film	**Selection in physical computing** Exploring conditions and selection using a programmable microcontroller.	**Flat-file databases** Using a database to order data and create charts to answer questions.	**Introduction to vector graphics** Creating images in a drawing program by using layers and groups of objects.	**Selection in quizzes** Exploring selection in programming to design and code an interactive quiz.

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Year 6	**Communication and collaboration** Exploring how data is transferred by working collaboratively online.	**Webpage creation** Designing and creating webpages, giving consideration to copyright, aesthetics and navigation.	**Variables in games** Exploring variables when designing and coding a game.	**Introduction to spreadsheets** Answering questions by using spreadsheets to organise and calculate data.	**3D modelling** Planning, developing, and evaluation 3D computer models of physical objects.	**Sensing movement** Designing and coding a project that captures inputs from physical devices.