Bowmansgreen Primary School

Computing Curriculum Overview

	Autumn One	Autumn Two	Spring One	Spring Two	Summer One	Summer Two
	Computing systems and networks	**Creating media**	**Programming A**	**Data and information**	**Creating media**	**Programming B**
Year One	**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 Two	**IT around us** *Identifying IT and how its responsible use improves our world in school and beyond.*	**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 to make an interactive quiz.*
Year Three	**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 by modifying text, images, and page layouts for a specified purpose.*	**Events and actions in programs** *Writing algorithms and programs that use a range of events to trigger sequences of actions.*
Year Four	**The internet** *Recognising the internet as 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 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 Five	**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.*	**Sensing movement** *Designing and coding a project that captures inputs from a physical device.*	**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.*
Year Six	**Communication and collaboration** *Exploring how data is transferred by working collaboratively online.*	**Web page 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 evaluating 3D computer models of physical objects.*	**Selection in physical computing** *Exploring conditions and selection using a programmable microcontroller.*