Beech Hill Primary School Computing Overview

	Computing systems and networks	**Creating media**	**Programming A**	**Data and information**	**Creating media**	**Programming B**
Year 1 Unit Overview	**Technology around us**	**Digital painting**	**Moving a robot**	**Grouping data**	**Digital writing**	**Programming animations**
Unit Summary	Recognising technology in school and using it responsibly.	Choosing appropriate tools in a program to create art, and making comparisons with working non-digitally.	Writing short algorithms and programs for floor robots, and predicting program outcomes.	Exploring object labels, then using them to sort and group objects by properties.	Using a computer to create and format text, before comparing to writing non-digitally.	Designing and programming the movement of a character on screen to tell stories.
Year 2 Unit Overview	**Information technology around us**	**Digital photography**	**Robot algorithms**	**Pictograms**	**Making music**	**Programming quizzes**
Unit Summary	Identifying IT and how its responsible use improves our world in school and beyond.	Capturing and changing digital photographs for different purposes.	Creating and debugging programs, and using logical reasoning to make predictions.	Collecting data in tally charts and using attributes to organise and present data on a computer.	Using a computer as a tool to explore rhythms and melodies, before creating a musical composition.	Designing algorithms and programs that use events to trigger sequences of code to make an interactive quiz.
Year 3 Unit Overview	**Connecting computers**	**Stop-frame animation**	**Sequencing sounds**	**Branching databases**	**Desktop publishing**	**Events and actions in programs**
Unit Summary	Identifying that digital devices have inputs, processes, and outputs, and how devices can be connected to make networks.	Capturing and editing digital still images to produce a stop-frame animation that tells a story.	Creating sequences in a block-based programming language to make music.	Building and using branching databases to group objects using yes/no questions.	Creating documents by modifying text, images, and page layouts for a specified purpose.	Writing algorithms and programs that use a range of events to trigger sequences of actions.

Year 4 Unit Overview	**The internet**	**Audio production**	**Repetition in shapes**	**Data logging**	**Photo editing**	**Repetition in games**
Unit Summary	Recognising the internet as a network of networks including the WWW, and why we should evaluate online content.	Capturing and editing audio to produce a podcast, ensuring that copyright is considered.	Using a text-based programming language to explore count-controlled loops when drawing shapes.	Recognising how and why data is collected over time, before using data loggers to carry out an investigation.	Manipulating digital images, and reflecting on the impact of changes and whether the required purpose is fulfilled.	Using a block-based programming language to explore count-controlled and infinite loops when creating a game.
Year 5 Unit Overview	**Systems and searching**	**Video production**	**Selection in physical computing**	**Flat-file databases**	**Vector drawing**	**Selection in quizzes**
Unit Summary	Recognising IT systems around us and how they allow us to search the internet.	Planning, capturing, and editing video to produce a short film.	Exploring conditions and selection using a programmable microcontroller.	Using a database to order data and create charts to answer questions.	Creating images in a drawing program by using layers and groups of objects.	Exploring selection in programming to design and code an interactive quiz.
Year 6 Unit Overview	**Communication and collaboration**	**Webpage creation**	**Variables in games**	**Introduction to spreadsheets**	**3D modelling**	**Sensing**
Unit Summary	Identifying and exploring how data is transferred and information is shared online.	Designing and creating webpages, giving consideration to copyright, aesthetics, and navigation.	Exploring variables when designing and coding a game.	Answering questions by using spreadsheets to organise and calculate data.	Planning, developing, and evaluating 3D computer models of physical objects.	Designing and coding a project that captures inputs from a physical device.

NB: Networks are not part of the key stage 1 national curriculum for computing but the title is used as a strand across primary