St Joseph's Catholic Primary School, Gateshead Computing Overview

Bishop Wilkinson Catholic Education Trust Through Christ, in Partnership

	Autumn term 1	Autumn term 2	Spring term 1	Spring term 2	Summer term 1	Summer term 2
Year 1	**Computing Systems & Networks** Technology around us Recognising technology in school and using it responsibly.	**Digital Painting** Explore the world of digital art and its exciting range of creative tools.	**Programming: Beebots** Moving a robot Writing short algorithms and programs for floor robots and predicting program outcomes.	**Data and Information** 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: Scratch Junior** 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 world in school and beyond.	**Digital photography** **Capturing and changing digital photographs for different purposes.**	**Programming: Beebots** Creating and debugging programs and using logical reasoning to make predictions.	**Data and Information Pictograms** Collecting data in tally charts and using attributes to organise and present data on a computer	**Making music** Using a computer as a tool to explore rhythms and melodies, before creating a musical composition.	**Programming: Scratch Junior** Programming quizzes Designing algorithms and programs that use events to trigger sequences of code 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.	**Programming: Scratch** Sequencing sounds Creating sequences in a block-based programming language to make music.	**Data and Information Databases** 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.	**Programming: Scratch** 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 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.	**Programming: Logo** Repetition in shapes Using a text-based programming language to explore count-controlled loops when drawing shapes.	**Data and Information 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.	**Programming: Scratch** 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 around us and how they allow us to search the internet.	**Video production** Planning, capturing, and editing video to produce a short film.	**Programming: Crumblebots** Selection in physical computing Exploring conditions and selection using a programmable microcontroller.	**Data and Information Data bases** Flat-file databases Using a database to order data and create charts to answer questions.	**Vector drawing** Creating images in a drawing program by using layers and groups of objects.	**Programming: Scratch** Selection in quizzes Exploring selection in programming to design and code an interactive quiz.
Year 6	**Communication and collaboration** Identifying and exploring how data is transferred and information is shared online.	Webpage creation **Designing and creating webpages, giving consideration to copyright, aesthetics, and navigation.**	**Programming: Scratch** Variables in games Exploring variables when designing and coding a game.	**Data and Information Spreadsheets** Introduction to spreadsheets Answering questions by using spreadsheets to organise and calculate data.	**3D modelling: Tinkercad** Planning, developing, and evaluating 3D computer models of physical objects	**Programming: Microbits** Sensing Designing and coding a project that captures inputs from a physical device.