



Computing Curriculum: Long term plan

Colour Key: Computer system and network; Creating media; Data and information; Programming

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
EYFS	Click here to see our EYFS Curriculum and Skills progression					
Year 1	Online Safety Self-image and identity Online relationships	Online Safety Online reputation Creating Media U2 Digital painting Choosing appropriate tools in a program to create art and making comparisons with working non-digitally. (Microsoft Paint or similar)	Online Safety Online bullying Computing systems and networks - Technology around us U1 Technology around us Recognising technology in school and using it responsibly (Paintz.app)	Online Safety Managing online information Data and information U4 Grouping data Exploring object labels, then using them to sort and group objects by properties. (Google slides or Powerpoint) Grouping data Spring 2 (science) 4	Online Safety Health, Well-being and lifestyle Programming Block A U3 Moving a robot Writing short algorithms and programs for floor robots and predicting program outcomes. (Bee-bot, blue-bot)	Online Safety Privacy and security Copyright and ownership Programming Block B U6 Programming animations Designing and programming the movement of a character on screen to tell stories. (Scratch Jnr)
Year 2	Online Safety Self-image and identity Online relationships Connecting systems and networks U1 Information technology around us Identifying IT and how its responsible use improves our world in school and beyond. (Google Slides/ PowerPoint)	Online Safety Online reputation Creating Media U2 Digital photography Capturing and changing digital photographs for different purposes. (Digital camera/Ipads)	Online Safety Online bullying Programming Block A U3 Robot algorithms Creating and debugging programs and using logical reasoning to make predictions. (Bee-bot, Blue-bot)	Online Safety Managing online information Creating Media U 5 Year 1) Digital writing Using a computer to create and format text, before comparing to writing non-digitally. (Google Docs or Microsoft Word)	Online Safety Health, Well-being and lifestyle Programming Block B U6 Programming quizzes Designing algorithms and programs that use events to trigger sequences of code to make an interactive quiz. (Scratch Jnr)	Online Safety Privacy and security Copyright and ownership Data and information U4 Pictograms Collecting data in tally charts and using attributes to organise and present data on a computer. (j2data pictogram)
Year 3	Online Safety Self-image and identity Online relationships Connecting systems and networks U1 Connecting Computers Identifying that digital devices have inputs, processes, and outputs, and how devices can be connected to make networks (Painting program)	Online Safety Online reputation Creating Media U5 Desktop Publishing Creating documents by modifying text, images, and page layouts for a specified purpose. (Canva.com)	Online Safety Online bullying Programming Block A U3 Sequencing Sounds Creating sequences in a block-based programming language to make music (Scratch)	Online Safety Managing online information Creating Media U2 Stop frame animation Capturing and editing digital still images to produce a stop-frame animation that tells a story. (iMotion)	Online Safety Health, Well-being and lifestyle Data and information U4 Branching databases Building and using branching databases to group objects using yes/no questions. (j2data Branch and Pictogram) Note: related to Maths Move to summer 1?	Online Safety Privacy and security Copyright and ownership Programming Block B U6 Events and actions in programs Writing algorithms and programs that use a range of events to trigger sequences of actions. (Scratch)
Year 4	Online Safety Self-image and identity Online relationships	Online Safety Online reputation Programming Block A U3	Online Safety Online bullying Creating Media U2	Online Safety Managing online information Creating Media U5	Online Safety Health, Well-being and lifestyle Data and information U4	Online Safety Privacy and security Copyright and ownership

	Connecting systems and networks U1 The internet Recognising the internet as a network of networks including the WWW, and why we should evaluate online content. (Various websites)	Repetition in Shapes Using a text-based programming language to explore count-controlled loops when drawing shapes. (FMSLogo/Turtle academy)	Audio Production Capturing and editing audio to produce a podcast, ensuring that copyright is considered. (Laptops-audacity)	Photo editing Manipulating digital images and reflecting on the impact of changes and whether the required purpose is fulfilled. (Laptops-Paint.NET)	Data logging Recognising how and why data is collected over time, before using data loggers to carry out an investigation. (Data logger or similar)	Programming Block B Repetition in games Using a block-based programming language to explore count-controlled and infinite loops when creating a game. (Scratch)
Year 5	Online Safety Self-image and identity Online relationships Connecting systems and networks U1 Systems and searching Recognising IT systems in the world and how some can enable searching on the internet. (Google Slides)	Online Safety Online reputation Programming Block A U3 Selection in physical computing Exploring conditions and selection using a programmable microcontroller. (Crumble controller)	Online Safety Online bullying Creating Media U2 Video Production Planning, capturing, and editing video to produce a short film. (Microsoft Photos)	Online Safety Managing online information Data and information U4 Flat file databases Using a database to order data and create charts to answer questions. (j2data Database)	Online Safety Health, Well-being and lifestyle Creating Media U5 Introduction to vector graphics Creating images in a drawing program by using layers and groups of objects. (Google Drawings/Publisher)	Online Safety Privacy and security Copyright and ownership Programming Block B U6 Selection in quizzes Exploring selection in programming to design and code an interactive quiz. (Scratch)
Year 6	Online Safety Self-image and identity Online relationships Connecting systems and networks U1 Communication and collaboration Exploring how data is transferred by working collaboratively online. (Google Slides)	Online Safety Online reputation Data and information U4 Introduction to spreadsheets Answering questions by using spreadsheets to organise and calculate data. (Google sheets/Excel)	Online Safety Online bullying Creating Media U2 Webpage creation Designing and creating webpages, giving consideration to copyright, aesthetics, and navigation. (Google sites)	Online Safety Managing online information	Online Safety Health, Well-being and lifestyle Programming Block A U3 Variables in games Exploring variables when designing and coding a game. (Scratch)	Online Safety Privacy and security Copyright and ownership Creating Media U5 3D modelling Planning, developing, and evaluating 3D computer models of physical objects. (Tinkercad)
						Programming Block B Sensing movement Designing and coding a project that captures inputs from a physical device. (Microbit and Microsoft Make Code)