Computing Progression of Learning 2026-27

William Fletcher Primary School

National Curriculum Overview

KS1	KS2
Pupils should be taught to: • understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions • create and debug simple programs • use logical reasoning to predict the behaviour of simple programs • use technology purposefully to create, organise, store, manipulate and retrieve digital content • recognise common uses of information technology beyond school • use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.	Pupils should be taught to: • design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts • use sequence, selection, and repetition in programs; work with variables and various forms of input and output • use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs • understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration • use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content • select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that

	accomplish given goals, including collecting, analysing, evaluating and presenting data and information • use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.

Computing Systems and Networks		
KS1	**LKS2**	**UKS2**
Improving mouse skills (Computing systems and networks) Developing mouse sills by learning how to log in and navigate around a computer while creating digital artwork. **What is a computer? (Computing systems and networks)** Exploring what a computer is by identifying different inputs and outputs and understanding how computers process information.	**Networks (Computing systems and networks)** Developing an understanding of computer networks by learning how devices communicate and share information. **Collaborative Learning (Computing systems and networks)** Developing collaborative working skills through using online software to create and share digital content.	**Search engines (Computing systems and networks)** Investigating how search engines work and developing effective searching skills to find relevant and accurate information online.

Creating Media		
KS1	**LKS2**	**UKS2**
Digital Imagery (Creating Media) Developing creativity and imagination through planning a miniature adventure story and capturing it using photography techniques.	**Video trailers (Creating media)** Developing digital video skills through creating trailers that use special effects, transitions and editing techniques. **Website design (Creating media)** Exploring the features of Google Sites and learning how websites are planned, created and organised for different audiences and purposes.	**Stop motion animation (Creating media)** Developing an understanding of animation by exploring stop-motion techniques and how moving images are created.

Data Handling		
KS1	**LKS2**	**UKS2**
International Space Station (Data Handling) Exploring how astronauts survive on the International Space Station, including how data is collected, used and displayed through sensor systems and monitoring equipment.	**Comparison cards databases (Data handling)** Exploring the concepts of sorting and filtering by learning about records, fields and data. **Investigating weather (Data handling)** Investigating how weather data is gathered, recorded and used to create forecasts through researching and using spreadsheets to organise information.	**Skills Showcase: Mars Rover** Investigating how computers represent and process digital images through pixels, binary code and image compression.

Programming		
KS1	**LKS2**	**UKS2**
Algorithms unplugged (Programming) Investigating algorithms, decomposition and debugging through unplugged activities linked to familiar contexts such as dressing up and making a sandwich. **Bee-bot (Programming)** Exploring programming by giving clear instructions to a virtual Bee-Bot and explaining how it works. **Algorithms and debugging (Programming)** Developing an understanding of what algorithms are, how to program them and how they can be developed to be more efficient through a range of unplugged and plugged-in activities. **Scratch Junior (Programming)** Exploring how programming blocks work using the app 'ScratchJr' and following a cycle of predict, test and review.	**Scratch (Programming)** Investigating programming through Scratch by creating animations and learning key coding concepts. **Further coding with scratch (Programming)** Designing and programming a game using variables, sensors and 'if' statements to control outcomes and interactions.	**Programming music (Programming)** Applying programming skills to create a soundtrack for a particular genre. **Micro:bit (Programming)** Exploring how to program the BBC micro:bit by tinkering with software, creating animations and investigating coding structures.

Online Safety		
KS1	**LKS2**	**UKS2**
Online Safety Exploring online safety, including how to stay safe online, manage emotions when something causes upset and understand responsibilities as a digital user. **Online Safety** Investigating online safety, including what happens to information posted online, how to keep personal information private and how permission is given or denied in online spaces.	**Online Safety** Further exploring online safety, including the difference between beliefs, opinions and facts, privacy settings, protecting personal information and responding to upsetting online content. **Online Safety** Developing online research skills by learning how to search for information and judge its probable accuracy.	**Online Safety** Investigating online communication, personal privacy and the impact technology can have on health and wellbeing.