

Year 7 Curriculum Plan

IT Computer Science Digital Literacy

Computing



Threads:

We use threads to signpost groups of units that link to one another, that together build a common body of knowledge over time. We use the term 'thread' to help us bring to mind the visual concept of a thread weaving through the curriculum:

Algorithms and data structures	Artificial intelligence	Computer systems	Creating media	Data and information	Design and development	Effective use of tools	Impact of technology	Networks	Programming	Safety and security
--------------------------------	-------------------------	------------------	----------------	----------------------	------------------------	------------------------	----------------------	----------	-------------	---------------------

	Autumn 1 7.1 - Using Computers Safely, Effectively and Reliably (UCSER)	Autumn 2 7.2 - Using Media	Spring 1 7.3 - Understanding Computers 1	Spring 2 7.4 – Control Systems (Flowol)	Summer 1: 7.5 - Block-based Programming	Summer 2 7.6 - Introduction to Spreadsheets
PRIOR LEARNING	KS2 Computing: - Basic use of school systems (logins, devices, apps) - Everyday digital use (apps, search, communication) - Awareness of online brands and media use Threads: - Safety and security - Effective use of tools - Impact of technology	KS2 Computing: - Poster design, presentations, basic image/text editing - Simple publishing tools used in primary projects Threads: - Creating media - Effective use of tools - Impact of technology	KS2 Computing: - Basic understanding of hardware/software - Simple recognition of computer components from KS2 exposure Threads: - Computer systems - Networks - Data and information	KS2 Computing: - Introduction to sequencing, logic, and basic algorithms - Problem solving in block-based environments (Scratch / 2Code / Lego WeDo) Threads: - Algorithms and data structures - Design and development - Programming	KS2 Computing: - Scratch, 2Code, Lego-based programming experience - Understanding of sequencing, loops, and simple conditionals. Threads: - Programming - Algorithms and data structures - Design and development - Computer systems - Effective use of tools	KS2 Computing: - Basic spreadsheet use (2Calculate / Excel exposure) - Simple data entry and calculations Threads: - Data and information - Effective use of tools - Design and development

Updated: April 2026

Year 7 Curriculum Plan

IT Computer Science Digital Literacy

Computing



KNOWING WHAT...	• Key file types and extensions (e.g. .docx, .ppt, .jpg) and how files are stored • Basic file management (folders, naming, saving, copying, deleting) • What makes a strong password and why it is important • Common online risks including phishing, identity theft, cyberbullying and scams • How search engines work and how to identify reliable information • Safe use of email (attachments, spam awareness, basic netiquette rules) • Basic concepts of social media safety and digital behaviour	• Media design principles (purpose, audience, layout) • File formats and media types • Copyright and ethical use of media • How media influences audiences	• Hardware components (CPU, RAM, storage, input/output) • Difference between hardware and software • Basic network concepts • How computers process data (binary)	• What a control system is and how it is used in real life • Flowchart symbols (process, decision, input/output) • Key ideas: sequencing, selection, repetition • How sensors and outputs are used in automated systems	• Programming constructs: sequence, selection, iteration • Variables and how they store and change data • Comparison and logical operators (AND/OR/NOT) • Count-controlled iteration • Condition-controlled iteration (introductory awareness) • Subroutines and why they are used (modular programming) • Input/output in simple systems	• Spreadsheet structure (cells, rows, columns, sheets) • Basic formulae (SUM, AVERAGE, simple calculations) • Data types (text, numbers, dates) • How data can be organised and presented
-----------------	--	---	--	--	---	--

Year 7 Curriculum Plan

IT Computer Science Digital Literacy

Computing



KNOWING HOW...	- Organise files using folders and naming conventions - Create, save, rename, copy and delete files - Use email to send, reply and attach files - Recognise and respond to phishing emails - Use search engines effectively (including basic advanced search) - Judge whether online information is trustworthy - Apply safe behaviour online and on social platforms - Explain how to reduce risks (viruses, scams, data loss)	- Create and edit digital media products - Respond to a client brief - Apply design principles effectively - Evaluate media against purpose and audience	- Explain how computer systems work - Interpret system diagrams - Describe how data is processed and transferred - Explain how networks enable communication	- Read and interpret flowcharts for control systems - Create flowcharts using sequence, selection, repetition and subroutines - Use Flowol to build, test and refine control systems - Apply sensors, outputs and control logic in simulations - Debug and improve flow-based solutions	- Create programs using sequencing, variables, selection and iteration - Use logical reasoning to predict program behaviour - Use variables to store and manipulate data within a program - Apply operators to control program flow - Debug and improve programs through testing and iteration - Design and use subroutines to structure solutions efficiently - Apply decomposition to solve larger problems - Build simple interactive programs using inputs and outputs	- Enter and organise data accurately in a structured format - Use formulae to perform calculations - Create and format charts to present data clearly - Interpret results to identify patterns and draw conclusions
----------------	--	---	---	---	---	--

Year 7 Curriculum Plan

IT Computer Science Digital Literacy

Computing



ASSESSMENT	Knowledge Check 1 Pupils complete a single written assessment covering the full unit. It includes multiple-choice, short recall, explanation, and scenario-based questions to assess knowledge, understanding, and application.	Knowledge Check 2 Pupils create a single practical media product (rolling slideshow) in response to a brief, assessed against design principles, purpose, and audience.	Knowledge Check 3 Pupils complete a single written theory assessment covering computer systems. It includes multiple-choice, short recall and explanation questions assessing knowledge of hardware components, the CPU, binary, logic, and input/output devices.	Knowledge Check 4 Pupils consolidate skills by independently designing and building a Ferris wheel control system in Flowol, demonstrating correct use of sequencing, selection, repetition and subroutines, alongside testing and debugging.	Knowledge Check 5 Pupils consolidate programming skills by independently designing and building a working program applying sequencing, variables, selection, iteration and subroutines.	Knowledge Check 6 Pupils consolidate spreadsheet skills by independently entering and organising data, applying formulae and functions, and creating and interpreting a chart based on their results.
------------	---	---	---	---	---	---

Year 7 Curriculum Plan

IT Computer Science Digital Literacy
Computing

