Walkwood
Church of England ✝ Middle School

Computing

Year 7 — 2 lessons per fortnight

Wk	Topic	Learning Content	Assessment
		Topic	**Learning Content**	**Assessment**
1	Expectations and eSafety	Know the rules for using school computers & the internet Use Microsoft Teams properly for learning & communication Keep personal information safe Spot unsafe or unkind behaviour online Know how to report anything worrying acceptable use, Teams, respectful behaviour, online safety, privacy, reporting, communication, personal information, risks, eSafety	
2			
3			
4			Baseline Assessment
5	Intro to Programming	Understand what programming is & why it's useful Use Scratch to create a working calculator Sequence instructions correctly to make a program run Use variables to store numbers & answers Add user input & display output clearly Test & debug a Scratch program programming, Scratch, calculator, sequence, selection, variables, input, output, debugging	
6			
7			
8			A working calculator
9			Digital Quiz
10	Office Skills and File Management	Open, save & organise files in folders Use Word to format text & create structured documents Use PowerPoint to design simple, clear presentations Use Excel to enter data & create basic charts or tables Name files & folders clearly and consistently Use OneDrive or shared areas to access & store work safely file management, Word, PowerPoint, Excel, folders, saving, formatting, OneDrive, organisation, cloud storage	
11			
12			
13			
14			
15			Digital Quiz
1	Introduction to HTML	Understand what HTML is and how it's used to build web pages Create structured content using headings, paragraphs, links, images, and lists Format text using bold, italic, underline, and apply colour using inline styles HTML, tags, formatting, colour, links, images, lists, browser, web page	
2			
3			
4			
5			Completed Web page
6			Digital Quiz
7	Vector Graphics	Understand what vector graphics are and how they differ from bitmap images Use basic shapes, colours, and layering to create a graphic Group, align, and arrange objects for clear design Export and save vector graphics correctly vector, Inkscape, shape, colour, layer, group, align, export	
8			
9			
10			
11			Peer Review
12			Digital Quiz
1	Computational Thinking	Understand what computational thinking is and why it's useful Apply decomposition to break problems into smaller parts Use pattern recognition to identify similarities Apply abstraction to focus on important information Create algorithms to solve problems step by step computational thinking, decomposition, pattern recognition, abstraction, algorithm, problem solving	
2			
3			
4			
5			
6			Problem Solving
7			Digital Quiz
8	Micro: bit Madness	Understand what a Micro: bit is and how it can be programmed Write simple programs using blocks or Python to control outputs (e.g. LED display) Use inputs like buttons and sensors to trigger actions Apply sequencing, selection, and repetition in Micro: bit code Test, debug, and improve Micro: bit programs Micro: bit, input, output, LED, buttons, sensors, sequence, selection, repetition, physical computing	
9			
10			
11			Working Micro: bit program
12			Digital Quiz

Autumn / Spring / Summer

Year 8 — 2 lessons per fortnight

Topic	Learning Content	Assessment
Expectations and eSafety		
Moving From Scratch (Turtle and Edublocks)	Understand the difference between block-based and text-based programming Use Turtle graphics to draw shapes and patterns Write simple Python code using Edublocks Apply sequencing, repetition, and basic functions Debug and improve code for accuracy and creativity Scratch, Python, Edublocks, Turtle, sequence, repetition, syntax, debugging	Turtle Drawing Challenge
Computers and the Binary Number System	Understand why computers use binary Convert between binary and decimal numbers Represent letters and symbols using binary codes Explore how images and colours are stored in binary binary, decimal, data, bits, bytes, ASCII, pixels, representation	ASCII code challenges Binary conversion tasks Digital Quiz
Introduction to HTML (2025-26 only)	Understand what HTML is and how it's used to build web pages Create structured content using headings, paragraphs, links, images, and lists Format text using bold, italic, underline, and apply colour using inline styles Save and open HTML files in a browser, following good coding habits HTML, tags, formatting, colour, links, images, lists, browser, web page	Completed Web page Digital Quiz
Back to The Future	Learn about the contributions of Turing, Berners-Lee, Boole & Babbage Understand Boolean logic & apply it to simple problems Use logic gates to model decision-making Explore Pigpen code as an example of symbolic communication Develop problem-solving skills through historical context Turing, Berners-Lee, Boole, Babbage, Boolean logic, logic gates, Pigpen code, problem solving, computing history	Digital Quiz
Using Media — Gaining Support for a Cause Project	Understand how media influences opinions Plan and create a campaign using digital tools Use persuasive techniques and design principles Check source credibility and reliability media, campaign, cause, persuasion, design, audience, communication, awareness	Presentation and Peer Review
MakeCode Arcade	Explore what AI is and how it's used. Understand how computers learn from data. Try out simple machine learning models. Learn how bias affects AI decisions. Use the AI lifecycle to solve problems. Discover AI careers and their impact. Artificial Intelligence, Machine Learning, Data, Bias, Model, Training, Prediction, Ethics, AI Lifecycle, Decision Tree, Model Card, Automation, Neural Network, Classification, AI Careers	Summative Assessment