

Water Mill Computing Curriculum Overview

	Theme 1	Theme 2	Theme 3	Theme 4	Theme 5
Year 1	Computer Science: Computer Systems and Networks Technology Around Us 	Computer Science: Programming Moving a Robot 	Computer Science: Programming Programming Animations 	Information Technology: Creating Media Digital Painting 	Information Technology: Creating Media Digital Writing 
Year 2	Computer Science: Computer Systems and Networks IT Around Us 	Information Technology: Creating Media Digital Music 	Computer Science: Programming programming Quizzes 	Information Technology: Creating Media Digit Photography 	Information Technology: Data Handling Pictograms 

	Theme 1	Theme 2	Theme 3	Theme 4
Year 3	Computer Science: Computer Systems and Networks Connecting Computers 	Computer Science: Programming An introduction to sequencing Code.org – Course C (Sequence into repetition) Lessons 3, 4, 5, 6, 7, 8, 9, 10 	Information Technology: Creating Media Desktop Publishing 	Information Technology: Data Handling Branching databases 
Year 4	Computer Science: Computer Systems and Networks The Internet 	Computer Science: Programming Events and Repetition in games Code.org – Course D (Events) Lessons 6, 7, 8 (Repetition) Lessons 11, 12, 13 	Information Technology: Creating Media Photo editing 	Information Technology: Creating Media Audio production 
Year 5	Computer Science: Programming Selection and conditions in programming Code.org – Year 4 Course D (Selection – conditional) Lessons L14, 15, 16, 17, 18, 19 	Information Technology: Creating Media Video Production 	Computer Science: Computer Systems and Networks Systems and searching 	Information Technology: Data Handling Spreadsheets (Y6) 
Year 6	Information Technology: Creating Media Website creation 	Computer Science: Programming Variables in Games Code.org – Course F (Variables) Lessons 7, 8, 9, 10, 11, 12 	Computer Science: Computer Systems and Networks Communication and collaboration 	Information Technology: Creating Media 3D Modelling 

Water Mill Computing Curriculum Coverage

National Curriculum coverage – Year 1	Technology around us. Teachcomputing.org COMPUTER SCIENCE	Programming A: Moving a robot - Teachcomputing.org COMPUTER SCIENCE	Programming B: Programming animations - Teachcomputing.org COMPUTER SCIENCE	Digital painting - Teachcomputing.org INFORMATION TECHNOLOGY	Digital writing - Teachcomputing.org INFORMATION TECHNOLOGY
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	✓			✓	✓

National Curriculum coverage – Year 2	IT around us - Teachcomputin g.org COMPUTER SCIENCE	Digital music - Teachcomputin g.org INFORMATION TECHNOLOGY	Programming B - programming quizzes Teachcomputin g.org COMPUTER SCIENCE	Digit photography - Teachcomputin g.org INFORMATION TECHNOLOGY	Pictograms - Teachcomputin g.org INFORMATION TECHNOLOGY
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	✓	✓		✓	✓

National Curriculum coverage – Year 3	Connecting Computers – Teachcomputing.org COMPUTER SCIENCE	Code.org – Course C (Sequence into repetition) Lessons 3, 4, 5, 6, 7, 8, 9, 10 COMPUTER SCIENCE	Desktop Publishing – Teachcomputing.org INFORMATION TECHNOLOGY	Branching databases – Teachcomputing.org INFORMATION TECHNOLOGY
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.	✓	✓	✓	✓
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National Curriculum coverage – Year 4	The Internet – Teachcomputing.org COMPUTER SCIENCE	Code.org – Course D (Events) Lessons 6, 7, 8 (Repetition) Lessons 11, 12, 13 COMPUTER SCIENCE	Photo editing – Teachcomputing.org INFORMATION TECHNOLOGY	Creating media - Audio production - Teachcomputing.org INFORMATION TECHNOLOGY
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.	✓	✓	✓	✓
National Curriculum coverage – Year 5	Code.org – Year 4 Course D (Selection – conditional) Lessons L14, 15, 16, 17, 18, 19 COMPUTER SCIENCE	Video Production – Teachcomputing.org INFORMATION TECHNOLOGY	Systems and searching – Teachcomputing.org COMPUTER SCIENCE	Information Technology: Data Handling Spreadsheets (Y6) INFORMATION TECHNOLOGY
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.	✓	✓	✓	✓

National Curriculum coverage – Year 6	Website creation – Teachcomputing.org INFORMATION TECHNOLOGY	Code.org – Course F (Variables) Lessons 7, 8, 9, 10, 11, 12 COMPUTER SCIENCE	Communication and collaboration – Teachcomputing.org DIGITAL LITERACY	Creating media – 3D Modelling – Teachcomputing.org INFORMATION TECHNOLOGY
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.	✓	✓	✓	✓