

Middleton Parish Church School: Topic Map, with National Curriculum Coverage: Computing

Key:

Computer Science

Information Technology

Digital Literacy

	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Term 1	Unit 1.1 Online safety and exploring Purple Mash (4 sessions)	Unit 2.1 Coding (5 sessions)	Unit 3.1 Coding (6 sessions)	Unit 4.1 Coding (6 sessions)	Unit 5.1 Coding (6 sessions)	Unit 6.1 Coding (6 sessions)
	Unit 1.2 Grouping and Sorting (2 sessions)	Unit 2.2. Online Safety (3 sessions)	Unit 3.2 Online Safety (3 sessions)	Unit 4.2 Online Safety (4 sessions)	Unit 5.2 Online Safety (3 sessions)	Unit 6.2 Online Safety (2 sessions)
	Unit 1.3 Pictograms (3 sessions)	Unit 2.3 Spreadsheets (4 sessions)	Unit 3.3 Spreadsheets (3 sessions)	Unit 4.3 Spreadsheets (6 sessions)	Unit 5.3 Spreadsheets (6 sessions)	Unit 6.3 Spreadsheets
Term 2	Unit 1.4 Lego Builders (3 sessions)	Unit 2.4 Questioning (5 sessions)	Unit 3.4 Touch Typing (4 sessions)	Unit 4.4 Writing for different audiences (5 sessions)	Unit 5.4 Databases (4 sessions)	Unit 6.4 Blogging (4 sessions)
	Unit 1.5 Maze Explorers (3 sessions)	Unit 2.5 Effective Searching (3 sessions)	Unit 3.5 Email (6 sessions)	Unit 4.5 Logo (4 sessions)	Unit 5.5 Game Creator (5 sessions)	Unit 6.5 Text adventures (5 sessions)
	Unit 1.6 Animated Story Books (5 sessions)	Unit 2.6 Creating Pictures (5 sessions)	Unit 3.6 Branching Databases (4 sessions)	Unit 4.6 Animation (3 sessions)	Unit 5.6 3D Modelling (4 sessions)	Unit 6.6 Networks (3 sessions)
Term 3	Unit 1.7 Coding (6 sessions)	Unit 2.7 Making Music (3 sessions)	Unit 3.7 Simulations (3 sessions)	Unit 4.7 Effective Searching (3 sessions)	Unit 5.7 Concept Maps (4 sessions)	Unit 6.7 Quizzing (6 sessions)
	Unit 1.8 Spreadsheets (3 sessions)	Unit 2.8 Presenting Ideas (4 sessions)	Unit 3.8 Graphing (3 sessions)	Unit 4.8 Hardware Investigators (2 sessions)	Unit 5.8 Word Processing with Microsoft Word (8 sessions)	Unit 6.8 Understanding Binary (4 sessions)
	Unit 1.9 Technology Outside School (2 sessions)		Unit 3.9 Presenting with Microsoft PowerPoint (5 sessions)	Unit 4.9 Making Music (4 sessions)		Unit 6.9 Spreadsheets with Microsoft Excell (8 sessions)

National Curriculum Attainment Targets Key Stage 1 Pupils should be taught to:	1	2
understand what algorithms are; how they are implemented as programs on digital devices: and that programs execute by following precise and unambiguous instructions	Unit 1.5: Maze Explorers (2Go) Unit 1.7 Coding (2Code)	Unit 2. 1 Coding (2Code)
create and debug simple programs		Unit 2.1 Coding (2Code)
use logical reasoning to predict the behaviour of simple programs	Unit 1.5: Maze Explorers (2Go) Unit 1.7 Coding (2Code)	Unit 2.1 Coding (2Code)
use technology purposefully to create, organise, store, manipulate and retrieve digital content	Unit 1.3 Pictograms (2Count) Unit 1.4 Lego Builders (2DIY) Unit 1.6 Animated Story Books (2CrateAStory) Unit 1.8 Spreadsheets (2Calculate)	Unit 2.3 Spreadsheets (2Calculate) Unit 2.6 Creating Pictures (2PaintAPicture) Unit 2.7 Making Music (2Sequence)
recognise common uses of information technology beyond school	Unit 1.8 Spreadsheets (2Calculate) <i>The Spreadsheet Scheme of Work models applications of technology to solving 'real world' problems</i> Unit 1.3 Pictograms (2Count) <i>A simple program for collecting and presenting 'real life' data</i> Unit 1.9 Technology Outside School	Unit 2.4 Questioning (2Question/2Investigate) <i>Simple programs for collecting and presenting 'real life' data</i>
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.	Unit 1.1 Online Safety and Exploring Purple Mash	Unit 2.2 Online Safety

National Curriculum Attainment Targets Key Stage 2 Pupils should be taught to:	3	4	5	6
design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts	Unit 3.1 Coding (2Code)	Unit 4.1 Coding (2Code) Unit 4.5 Logo (2Logo)	Unit 5.1 Coding (2Code)	Unit 6.1 Coding (2Code) Unit 6.5 Text Adventures (2Code) Unit 6.8 Understanding Binary (2Code)
use sequence, selection, and repetition in programs; work with variables and various forms of input and output	Unit 3.1 Coding (2Code) Unit 3.5 Email (2DIY)	Unit 4.1 Coding (2Code) Unit 4.5 Logo (2Logo) Unit 4.4 Writing for Different Audiences (2DIY)	Unit 5.1 Coding (2Code)	Unit 6.1 Coding (2Code) Unit 6.5 Text Adventures (2Code) Unit 6.7 Quizzing (2DIY) Unit 6.8 Understanding Binary (2Code)
use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs	Unit 3.1 Coding (2Code)	Unit 4.1 Coding (2Code) Unit 4.5 Logo (2Logo)	Unit 5.1 Coding (2Code)	Unit 6.1 Coding (2Code) Unit 6.5 Text Adventures (2Code) Unit 6.8 Understanding Binary (2Code)

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	Unit 3.5 Email (2Email)	Unit 4.4 Writing for Different Audiences (2Email)	Unit 5.7 Concept Maps (2Connect)	Unit 6.4 Blogging (2Blog)
use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content	<i>Internet research and effective searching, including searching for images</i>	<i>Internet research and effective searching, including searching for images</i>	<i>Internet research and effective searching, including searching for images</i>	<i>Internet research and effective searching, including searching for images</i>
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	Unit 3.3 Spreadsheets (2Calculate) Unit 3.6 Branching Databases (2Question) Unit 3.8 Graphing (2Graph)	Unit 4.3 Spreadsheets (2Calculate) Unit 4.6 Animation (2Animate)	Unit 5.3 Spreadsheets (2Calculate) Unit 5.4 databases (2Question and 2Investigate) Unit 5.5 Game Creator (2DIY 3D) Unit 5.6 3D Modelling (2DesignAndMake)	Unit 6.3 Spreadsheets (2Calculate) Unit 6.7 Quizzing (2Investigate and 2DIY)
use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.	Unit 3.2 Online Safety	Unit 4.2 Online Safety	Unit 5.2 Online Safety	Unit 6.2 Online Safety