Years 1-6 include an Online Safety unit each. See the: Guidance: How to fit in our Online safety units for information about how to include these in your curriculum time. All units have five lessons unless otherwise stated.

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2	Online safety
EYFS	Set up continuous provision in your classroom: Computing through continuous provision	**Computing systems and networks** Using a computer Learning about the main parts of a computer and how to use the keyboard and mouse. Learning how to log in and out.	**Programming 1** All about instructions The children learn to receive and give instructions and understand the importance of precise instructions.	**Computing systems and networks** Exploring hardware Tinkering and exploring with different computer hardware and learning to operate a camera.	**Programming 2** Programming Bee-Bots Children learn about directions, experiment with programming a Bee-bot/Blue-bot and tinker with hardware.	**Data handling** Introduction to data Children sort and categorise data and are introduced to branching databases and pictograms.	
Year 1	**Computing systems and networks** Improving mouse skills	**Programming 1** Algorithms unplugged	**Skills showcase** Rocket to the moon	**Programming 2** Programming Bee-bots Option 1: Bee-Bots Option 2: Virtual Bee-bots	**Creating media** Digital imagery Option 1: Google Option 2: Microsoft Office 365	**Data handling** Introduction to data	**Online safety** Online safety Y1 (4 lessons)
Year 2	**Computing systems and networks 1** What is a computer?	**Programming 1** Algorithms and debugging	**Computing systems and networks 2** Word processing Option 1: Google Option 2: Microsoft Office 365	**Programming 2** Programming: ScratchJr	**Creating media** Stop Motion Option 1: Using tablet devices Option 2: Using cameras Option 3: Devices without cameras	**Data handling** International Space Station	**Online safety** Online safety Y2

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2	Online safety
Year 3	**Computing systems and networks 1**	**Programming**	**Computing systems and networks 2**	**Computing systems and networks 3**	**Creating media**	**Data handling**	**Online safety**
	Networks and the internet Option 1: Google) Option 2: Microsoft Office 365	Programming: Scratch	Emailing Option 1: Google Option 2: Microsoft Office 365	Journey inside a computer	Video trailers Option 1: Using devices other than iPads , Option 2: Using iPads	Comparison cards databases Option 1: Google Option 2: Microsoft Office 365	Online safety Y3 (4 lessons)
Year 4	**Computing systems and networks**	**Programming 1**	**Creating media**	**Skills showcase**	**Programming 2**	**Data handling**	**Online safety**
	Collaborative Learning Option 1: Google Option 2: Microsoft Office 365	Further coding with Scratch Option 1: Google Option 2: Microsoft Office 365	Website design Option 1: Google Option 2: Microsoft Office 365	HTML	Computational thinking	Investigating weather Option 1: Google Option 2: Microsoft Office 365	Online safety Y4 (6 lessons)
Year 5	**Computing systems and networks**	**Programming 1**	**Data handling**	**Programming 2**	**Creating media**	**Skills showcase**	**Online safety**
	Search engines Option 1: Google Option 2: Microsoft Office 365	Programming music Option 1: Sonic Pi , Option 2: Scratch	Mars Rover 1	Micro:bit	Stop motion animation Option 1: Stop motion studio Option 2: Using cameras	Mars Rover 2	Online safety Y5
Year 6	**Computing systems and networks**	**Programming**	**Data handling**	**Creating media**	**Data handling**	**Skills showcase**	**Online safety**
	Bletchley Park Option 1: Google Option 2: Microsoft Office 365	Intro to Python	Big data 1	History of computers Option 1: Google Option 2: Microsoft Office 365	Big data 2	Inventing a product Option 1: Google Option 2: Microsoft Office 365	Online safety Y6 (6 lessons)

Year 1

Autumn 1	**Computing systems and networks** **Improving mouse skills** (5 lessons) Learning how to login and navigate around a computer; developing mouse skills; learning how to drag, drop, click and control a cursor to create works of art	**Autumn 2**	**Programming 1** **Algorithms unplugged** (5 lessons) Algorithms, decomposition and debugging are made relatable to familiar contexts, following directions, learning why instructions need to be specific.
Spring 1	**Skills showcase** **Rocket to the moon** (5 lessons) Developing keyboard and mouse skills through designing, building and testing. Creating a digital list of materials, using drawing software and recording data.	**Spring 2**	**Programming 2** **Programming Bee-Bots (5 lessons)** **(Option 1: Bee-Bot) (Option 2: Virtual Bee-Bot)** Introducing programming through the use of a Bee-Bot and exploring its functions.
Summer 1	**Creating media** **Digital imagery (5 lessons)** **(Option 1: Google) (Option 2: Microsoft Office 365)** Taking and editing photos, searching for and adding images to a project.	**Summer 2**	**Data handling** **Introduction to data** (5 lessons) Learning what data is and the different ways it can be represented. Learning why data is useful and the ways it can be gathered and recorded.
Online safety	**Online safety** **Online safety Y1** (4 lessons) Learning how to stay safe online and how to manage feelings and emotions when someone or something has upset us.		

Year 2

Autumn 1

Computing systems and networks

What is a computer? (5 lessons)
Exploring what a computer is by identifying how inputs and outputs work and how computers are used in the wider world to design their own computerised invention.

Autumn 2

Programming 1

Algorithms and debugging (5 lessons)
Developing an understanding of; what algorithms are, how to program them and how they can be developed to be more efficient, introduction of loops.

Spring 1

Computing systems and networks

Word processing (5 lessons)
(Option 1: Google) (Option 2: Microsoft Office 365)
Developing touch typing skills, learning keyboard shortcuts and simple editing tools.

Spring 2

Programming 2

ScratchJr (5 lessons)
Exploring what 'blocks' do' by carrying out an informative cycle of predict > test > review. Programming a familiar story and make a musical instrument.

Summer 1

Creating media

Stop Motion (5 lessons) (Option 1: Using tablet devices), (Option 2: Devices with cameras) or (Option 3: Devices without cameras)
Learning how to create simple animations from storyboarding creative ideas.

Summer 2

Data handling

International Space Station (5 lessons)
Learning how data is collected, used and displayed and the scientific learning of the conditions needed for plants and humans, to survive.

Online safety

Online safety

Online safety Y2 (5 lessons)
Learning: how to keep information safe and private online; who we should ask before sharing things online and how to give, or deny permission online.

Year 3

Autumn 1	**Computing systems and networks** **Networks and the internet ((5 lessons)** (Option 1:Google) (Option 2: Microsoft Office 365) Learning what a network and how devices communicate and share information.	**Autumn 2**	**Programming** Scratch **(5 lessons)** Exploring the programme Scratch, following the predict > test > review cycle. Learning about 'loops' and programming an animation, story and game.
Spring 1	**Computing systems and networks** **Emailing (5 lessons)** (Option 1: Google) (Option 2: Microsoft Office 365) Sending emails with attachments and understanding what cyberbullying is.	**Spring 2**	**Computing systems and networks** Journey inside a computer **(5 lessons)** Assuming the role of computer parts and creating paper versions of computers to consolidate understanding of how a computer works.
Summer 1	**Creating media** **Video trailers (5 lessons)** (Option 1: Using devices other than iPads) (Option 2: Using iPads) Developing digital video skills to create trailers, with special effects and transitions.	**Summer 2**	**Data handling** **Comparison cards databases (5 lessons)** (Option 1: Google) (Option 2: Microsoft Office 365) Learning about records, fields and data and sorting and filtering data.
Online safety	**Online safety** Online safety Y3 **(4 lessons)** Learning: the difference between fact, opinion and belief; and how to deal with upsetting online content. Knowing how to protect personal information online.		

Year 4

Autumn 1

Computing systems and networks

Collaborative learning (5 lessons)
(Option 1: Google) (Option 2: Microsoft Office)
Learning how to work collaboratively and exploring a range of collaborative tools.

Autumn 2

Programming

Further coding with Scratch (5 lessons)
(Option 1: Google) (Option 2: Microsoft Office 365)
Revisiting the key features and beginning to use 'variables' in code scripts.

Spring 1

Computing systems and networks

Website design (5 lessons)
(Option 1: Google) (Option 2: Microsoft Office 365)
Learning how web pages and sites are created and how to embed media and links.

Spring 2

Computing systems and networks

HTML (5 lessons)
Learning about the markup language behind a webpage; becoming familiar with HTML tags, changing HTML and CSS code to alter images and 'remix' a live website.

Summer 1

Creating media

Computational thinking (5 lessons)
Solving problems effectively using the four areas of abstraction, algorithm design, decomposition and pattern recognition.

Summer 2

Data handling

Investigating weather (5 lessons)
(Option 1: Google) (Option 2: Microsoft Office 365)
Researching and storing data on spreadsheets and designing a weather station.

Online safety

Online safety

Online safety Y4 (6 lessons)
Searching for information and making a judgement about the probable accuracy; recognising adverts and pop-ups; understanding that technology can be distracting.

Year 5

Autumn 1	**Computing systems and networks** **Search engines (5 lessons)** (Option 1: Google) (Option 2: Microsoft Office 365) Learning about how page rank works and how to identify inaccurate information.	**Autumn 2**	**Programming 1** **Programming music (5 lessons)** (Option 1: Sonic Pi) (Option 2: Scratch) Building-on programming and music skills to create different sounds, beats and melodies which are put to the test with a Battle of the Bands performance!
Spring 1	**Data handling** Mars Rover 1 **(5 lessons)** Learning about the Mars Rover, exploring how and why it transfers data including instructions, and how messages can be sent using binary code.	**Spring 2**	**Programming 2** Micro:bit **(5 lessons)** Creating algorithms and programs that are used in the real world. Using the 'predict, test and evaluate' cycle to create and debug programs with specific aims.
Summer 1	**Creating media** **Stop motion animation (5 lessons)** (Option 1: Stop Motion Studio) (Option 2: with cameras) Creating animations, storyboard ideas and decomposing a story into small parts before putting together to create the illusion of a moving image.	**Summer 2**	**Skills showcase** Mars Rover 2 **(5 lessons)** Exploring how the Mars rover: moves, follows instructions, collects and sends data; understanding how computers work, what data is and how it is transferred.
Online safety	**Online safety** Online safety Y5 **(5 lessons)** Learning about app permissions; the positive and negative aspects of online communication; that online information is not always factual; how to deal with online bullying and managing our health and wellbeing.		

Standard Long-term plan

Year 6

	Computing systems and networks			Programming
Autumn 1	**Bletchley Park** (**5 lessons**) [(Option 1: Google)](#) [(Option 2: microsoft Office 365)](#) Discovering the history of Bletchley and learning about code breaking and password hacking. Demonstrating digital literacy skills by creating presentations.		**Autumn 2**	**Intro to Python** (**5 lessons**) Using the programming language 'Python' to create designs and art. Learning how to create loops and nested loops to make their code more efficient.
	Data handling			**Creating media**
Spring 1	**Big data 1** (**5 lessons**) Identifying how barcodes and QR codes work. Learning how infrared waves are used for the transmission of data while recognising the uses of RFID.		**Spring 2**	**History of computers** (**5 lessons**) [(Option 1: Google)](#) [(Option 2: Microsoft Office)](#) Writing, recording and editing radio plays set during WWII, learning about how computers have evolved.
	Data handling			**Skills showcase**
Summer 1	**Big data 2** (**5 lessons**) Further developing understanding of how networks and the Internet are able to share information. Learning how big data can be used to design smart buildings.		**Summer 2**	**Inventing a product** [(Option 1: Google)](#) [(Option 2: Microsoft Office 365)](#) (**5 lessons**) Designing a product, pupils: evaluate, adapt and debug code to make it suitable for their needs and designing products in CAD and creating a website and video.
	Online safety			
Online safety	**Online safety Y6** (**6 lessons**) Learning to deal with issues online; about the impact and consequences of sharing information online; how to develop a positive online reputation; combating and dealing with online bullying and protective passwords.			