

	Autumn	Spring	Summer
EYFS	Online Safety Read 'Once Upon a Time Online' 'Monkey Cow'	Programming 1: All about instructions	Programming 2: Programming Bee-Bots
Year 1	Online Safety: Year 1	Programming 1: Algorithms unplugged	Creating media: Digital imagery
Year 2	Online Safety: Year 2 Computing systems and networks 2: Word processing	Programming 1: Algorithms and debugging	Programming 2: Introduction to block coding Option 2: Scratch Jr
Year 3	Online Safety: Year 3	Programming - Scratch	Computing systems and networks: networks
Year 4	Online Safety: Year 4	Programming 1 – Further coding with Scratch	Creating media – Website design Google unit
Year 5	Online Safety: Year 5	Programming 1: Music	Computing systems and networks: Search engines
Year 6	Online Safety: Year 6	Programming: Intro to Python	Computing systems and networks - exploring AI (Computing Science)

Nursery	
Communication (Presenting information): <ul style="list-style-type: none">• Use one handed tools and equipment (clicking on an iPad, using a mouse, clicking a Beebot or clicking a keypad).	Computing Science (Coding): <ul style="list-style-type: none">• Understand position through words alone – for example, “The bag is under the table,” – with no pointing (Beebots).
Online Safety <ul style="list-style-type: none">• Understand to speak to a trusted adult when using electronics.• Understand what is meant by personal information (names) and how we must keep this private.	
Vocabulary Phone, iPad, on, off, charging, low battery, video, picture.	

Reception	
<p>Communication (Presenting information):</p> <ul style="list-style-type: none"> • Develop their small motor skills so that they can use a range of tools competently, safely and confidently. Suggested tools: pencils for drawing and writing, paintbrushes, scissors, knives, forks and spoons. (Taping on a keypad and drawing on the iPad). • Children need to be able to identify electronics. 	<p>Computing Science (Coding):</p> <ul style="list-style-type: none"> • Understand position through words alone – for example, “The bag is under the table,” – with no pointing. (Playing with Bee Bots).
<p>Online Safety</p> <ul style="list-style-type: none"> • Understand to speak to a trusted adult when having concerns about content or contact on the internet or online technologies. • Understand what is meant by personal information (names, school, address) and how we must keep this private. 	
<p>Vocabulary</p> <ul style="list-style-type: none"> • Personal information, trusted adult, • Information, instructions (leads to the word algorithm), order (leads to the word sequence), • electronics, Bee-Bot, tinker, direction, turn, change (leads to the word debug). 	

Year 1	
<p>Communication (Presenting information):</p> <ul style="list-style-type: none"> Recognise common uses of technology in the home and school environment. Use technology for a purpose to create forms of digital content. Take picture, edit pictures, and learn where keys are located on a keyboard. Understand that networks are used to wirelessly send information (Sending a file to a printer). Children need to be able to identify electronics in the wider community (websites for a purpose - eg: online shopping), digital calendars, digital TVs, microwaves, games consoles, e-book readers, Sat Nav systems or other GPS devices). 	<p>Computing Science (Coding):</p> <ul style="list-style-type: none"> Understand that algorithms are instructions for technology. Share examples of when instructions might be used by a digital device (when setting an alarm, count downs on a camera). Understand algorithms need simple instructions. Predict the behaviour of simple programs (Read examples of codes and predict what will happen, in scratch junior or written instructions). Create a simple program.
<p>Online Safety</p> <ul style="list-style-type: none"> Understand to speak to a trusted adult when having concerns about content or contact on the internet or online technologies. Understand what is meant by personal information (names, school, address) and how we must keep this private. Know how to balance time spent online and offline. Recognise how actions on the internet can affect others. 	
<p>Vocabulary</p> <ul style="list-style-type: none"> Going online, internet, report, website, app, sharing Offline, algorithm, code, debug, break down (leads to the word decompose), sequence Device, technology, video, touch screen. 	

Year 2	
<p>Communication (Presenting information):</p> <ul style="list-style-type: none"> Recognise common uses of technology in the wider world (Satellite navigation, radio, contactless payments) Use technology for a purpose to create forms of digital content. Find websites and images using a common search engine. Know how to search safely and understand how to search specifically. Understand that networks are used to wirelessly send information (saving files to a school network). Display information in a purposeful way and explain why you choose that program. Compare the benefits of different programs and why one may be chosen over another. 	<p>Computing Science (Coding):</p> <ul style="list-style-type: none"> Understand that algorithms are instructions for technology. Share examples of when instructions might be used by a digital device (when setting an alarm, count downs on a camera). Understand that programs execute precisely what is input. Use logical reasoning to predict the behaviour of simple programs (E.g.: look at commands/input and explain how something will behave) Create a simple program. Debug simple programs
<p>Online Safety</p> <ul style="list-style-type: none"> Understand to speak to a trusted adult when having concerns about content or contact on the internet or online technologies. Understand what is meant by personal information and how we must keep this private. Understand that what we see online may not always be true and we must check with a trusted adult 	
<p>Vocabulary</p> <ul style="list-style-type: none"> consent, permission, fake, real, online, offline, password, personal information, trusted adult, Backspace, copy, delete, italics, keyboard, paste, space bar, underline, undo, event, input, debug, program, sequence, algorithm, code blocks, 	

Year 3	
<p>Communication (Presenting information):</p> <ul style="list-style-type: none"> • Use technology for a purpose to create forms of digital content (including learning to save images and insert them into word processors). • Understand that networks and the internet are used to wirelessly send information (saving files to a school network). • Display information in a purposeful way and explain why you choose that program. 	<p>Computing Science (Coding):</p> <ul style="list-style-type: none"> • Design programs that simulate events. • To read code and predict what the code will do. • Create a simple program. • Debug simple programs
<p>Online Safety</p> <ul style="list-style-type: none"> • Understand that some online resources are more trustworthy than others. • To understand what online bullying is. • To know what acceptable and unacceptable behaviour looks like online. • Understand the purpose of 'block' and 'report' features on apps, games and websites 	
<p>Vocabulary</p> <ul style="list-style-type: none"> • Accurate, age restrictions, content, fact, opinion, fake news, emoji, permissions, privacy settings, reliable, social media, • Algorithm. Code, debug, decompose, loop, predict, program, tinker, spite, code blocks, event. • Device, file, network, internet, router, server, wireless, hardware, software, networks. 	

Year 4	
<p>Communication (Presenting information):</p> <ul style="list-style-type: none"> • To use input devices. • To use iPads and with confidence. • To understand how the servers hold data for a network (Our network holds our login details, saved files and user data). • To present my work clearly. 	<p>Computing Science (Coding):</p> <ul style="list-style-type: none"> • Design, write and debug programs for purposes. • To read through algorithms and identify mistakes. • To read code and predict what the code will do.
<p>Online Safety</p> <ul style="list-style-type: none"> • Understand where to go for help or support when concerns arise online (Eg: CEOP). • Recognise fake news. • Explain some positive and negative distractions of using technology and small strategies for reducing the time spent on technology. 	
<p>Vocabulary</p> <ul style="list-style-type: none"> • advertisements, bot, distraction, hashtag, implications, influencer, reliable, risk, screen time, search results, trustworthy • code block, conditional statement, coordinates, decompose, feature, negative number, orientation, position, script, sprite, stage, tinker • create, embed, evaluate, features, Google sites, homepage, hobby, hyperlinks, images, insert, published, subpage, tab, theme, webpage, website, world wide web 	

Year 5	
<p>Communication (Presenting information):</p> <ul style="list-style-type: none"> • Present data clearly and using an appropriate piece of software. 	<p>Computing Science (Coding):</p> <ul style="list-style-type: none"> • To program and increasingly complex set of instructions (selection) - Quizzes on scratch. • To write a program which included a loop. Debug written code – removing repeating coding for a loop function. • Debug an increasingly complex set of instructions. • To read code offline and explain what the code with do.
<p>Online Safety</p> <ul style="list-style-type: none"> • Use filters when searching to find specific results. • Explain how results are selected and ranked on common search engines. • Understand where to go for help or support when concerns arise online (Eg: CEOP) • Understand that passwords need to be strong and that apps require some form of password. 	
<p>Vocabulary</p> <ul style="list-style-type: none"> • app permissions, in-app purchases, emojis, positive/negative contribution, judgement, meme • decompose, loop, debug, output, pitch, repeat, rhythm, tempo, timbre • copyright, credit, fake news, inaccurate, index, page rank, search engine, TASK, web crawler, networks 	

Year 6	
<p>Communication (Presenting information):</p> <ul style="list-style-type: none"> • Use software and apps relevant to the audiences and intentions presented. • Recap how networks enable collaboration and sharing. • To use more than one piece of software at a time to complete a task (insert images into coding programs). 	<p>Computing Science (Coding):</p> <ul style="list-style-type: none"> • Include use of sequences, selection and repetition with hardware used in real-life systems. • Solve problems by breaking them down into smaller parts (Eg: debugging an issue with a single sprite on Scratch before moving on to the next). • Use named variables to make repeated programming simpler.
<p>Online Safety</p> <ul style="list-style-type: none"> • Identify a range of ways to report concerns about content in and out of school. • Know how to deal with phishing, including reporting. • Know the importance of using technology respectfully and responsibly. • Explain what a digital reputation is. 	
<p>Vocabulary</p> <ul style="list-style-type: none"> • Anonymity, antivirus, digital footprint, online reputation, phishing, malware, scammers, screen grab, two-factor authentication • Command, code, algorithm, input, loop, output, repeat, data. • AI-generated image/text, authenticity, ethical, fake, modify, considerations 	