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Progression of Computing
Knowledge Skills and Concepts

	Nursery	Reception	Year 1	Year 2	End of Key Stage 1
Hardware	Have daily access to a range of technology resources such as torches with switches, remote controlled cars, beebots, talking tins, voice-recording toys, as well as class ipads and interactive whiteboards. Press buttons to turn hardware off and on.	Learning how to operate a camera to take photographs of meaningful creations or moments. Learning how to explore and tinker with hardware to develop familiarity and introduce relevant vocabulary. Recognising and identifying familiar letters and numbers on a keyboard. Developing basic mouse skills such as moving and clicking. Physical Development - Develop their small motor skills so that they can use a range of tools competently, safely and confidently. (ELG)	Learning how to operate a camera or tablet to take photos and videos. Learning how to explore and tinker with hardware to find out how it works. Recognising that some devices are input devices and others are output devices. Learning where keys are located on the keyboard. Understanding what a computer is and that it's made up of different components. Learning how we know that technology is doing what we want it to do via its output. Developing confidence with the keyboard and the basics of touch typing.	Learning how to operate a camera or tablet to take photos and videos. Learning how to explore and tinker with hardware to find out how it works. Recognising that some devices are input devices and others are output devices. Learning where keys are located on the keyboard. Recognising that buttons cause effects and that technology follows instructions. Using greater control when taking photos with cameras, tablets or computers.	Pupils learn to: 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.

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			Recognising that buttons cause effects and that technology follows instructions. Using greater control when taking photos with cameras, tablets or computers.		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.

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Computational thinking	Are taught how to use the resources for different purposes eg ipads to watch videos, play games, take photographs and listen to stories.	Using logical reasoning to understand simple instructions and predict the outcome.	Learning that decomposition means breaking a problem down into smaller parts and articulating this. Using decomposition to solve unplugged challenges. Using logical reasoning to predict the behaviour of simple programs. Developing the skills associated with sequencing in unplugged activities. Following a basic set of instructions. Assembling instructions into a simple algorithm. Explaining what an algorithm is. Following an algorithm. Creating a clear and precise algorithm.	Using decomposition to solve unplugged challenges. Using logical reasoning to predict the behaviour of simple programs. Developing the skills associated with sequencing in unplugged activities. Following a basic set of instructions. Assembling instructions into a simple algorithm Explain what an algorithm is. Following an algorithm. Creating a clar and precise algorithm. Learning that programs execute by following precise	

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			Learning that programs execute by following precise instructions. Incorporating loops within algorithms. Decomposing a game to predict the algorithms used to create it. Learning that there are different levels of abstraction.	instructions. Incorporating loops within algorithms.	

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Knowledge Skills and Concepts

Programming	Following instructions as part of practical activities and games. Learning to give simple instructions.	Following instructions as part of practical activities and games. Learning to give simple instructions. Experimenting with programming a Bee-bot/ Blue-bot and learning how to give simple commands. Learning to debug instructions, with the help of an adult, when things go wrong. To know that being able to follow and give simple instructions is important in computing. To understand that it is important for instructions to be in the right order. To understand why a set of instructions may have gone wrong.	Learning to debug instructions when things go wrong. Learning to debug an algorithm in an unplugged scenario. Using logical thinking to explore software, predicting, testing and explaining what it does. Using an algorithm to write a basic computer program. To understand that an algorithm is when instructions are put in an exact order. To know that input devices get information into a computer and that output devices get information out of a computer. To understand that decomposition means breaking a problem into	Programming a Floor robot to follow a planned route. Using programming language to explain how a floor robot works. Using logical thinking to explore software, predicting, testing and explaining what it does. Using an algorithm to write a basic computer program. Using loop blocks when programming to repeat an instruction more than once. Learning to debug instructions when things go wrong. Learning to debug an algorithm in an unplugged scenario. To understand the basic functions of a Bee-Bot.	

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		To know that you can program a Bee-Bot with some simple commands. Communication and Language :use talk to help work our problems and organise thinking and activities, and to explain how things work and why they might happen.	manageable chunks and that it is important in computing. To know that we call errors in an algorithm 'bugs' and fixing these 'debugging'. To know that coding is writing in a special language so that the computer understands what to do. To understand that the character in ScratchJr is controlled by the programming blocks. To know that you can write a program to create a musical instrument or tell a joke.	To know that you can use a camera/tablet to make simple videos. To know that algorithms move a bee-bot accurately to a chosen destination. To understand what machine learning is and how that enables computers to make predictions. To know that loops in programming are where you set a certain instruction (or instructions) to be repeated multiple times. To know that abstraction is the removing of unnecessary detail to help solve a problem.	

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Using Software	Use a range of technology resources to support learning in other areas of the curriculum.	Using a simple online paint tool to create digital art. To know that you must hold the camera still and ensure the subject is in the shot to take a photo.	Using a basic range of tools within graphic editing software. Taking and editing photographs. Developing control of the mouse through dragging, clicking and resizing of images to create different effects. Developing understanding of different software tools. Developing word processing skills, including altering text, copying and pasting and using keyboard shortcuts. Using word processing software to type and reformat text. Creating and labelling images.	Using a basic range of tools within graphic editing software. Taking and editing photographs. Developing control of the mouse through dragging, clicking and resizing of images to create different effects. Developing understanding of different software tools. Using software (and unplugged means) to create story animations. Creating and labelling images.	

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Using email and internet searches			Recognising devices that are connected to the internet. Understanding that we are connected to others when using the internet. Searching for appropriate images to use in a document. Understanding what online information is.	Searching and downloading images from the internet safely. Recognising devices that are connected to the internet. Understanding that we are connected to others when using the internet.	

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Progression of Computing
Knowledge Skills and Concepts

Using data			Understanding that technology can be used to represent data in different ways: pictograms, tables, pie charts, bar charts, block graphs etc. To know how that charts and pictograms can be created using a computer. To understand that a branching database is a way of classifying a group of objects. To know that computers understand different types of 'input'.	Understanding that technology can be used to represent data in different ways: pictograms, tables, pie charts, bar charts, block graphs etc. Collecting and inputting data into a spreadsheet. Interpreting data from a spreadsheet. Using representations to answer questions about data. Using software to explore and create pictograms and branching databases. To understand that you can enter simple data into a spreadsheet. To understand what steps you need to take to create an algorithm.	

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Progression of Computing
Knowledge Skills and Concepts

				To know what data to use to answer certain questions. To know that computers can be used to monitor supplies.	
Wider use of technology			Recognising common uses of information technology, including beyond school. Understanding some of the ways we can use the internet. Learning how computers are used in the wider world.	Learning how computers are used in the wider world.	

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Knowledge Skills and Concepts

Digital Literacy		Recognising that a range of technology is used for different purposes. Learning to log in and log out.	Logging in and out and saving work on their own account. When using the internet to search for images, learning what to do if they come across something online that worries them or makes them feel uncomfortable. Understanding how to interact safely with others online. Recognising how actions on the internet can affect others. Recognising what a digital footprint is and how to be careful about what we post. Identifying whether information is safe or unsafe to be shared online.	Learning how to create a strong password. Understanding how to stay safe when talking to people online and what to do if they see or hear something online that makes them feel upset or uncomfortable. Identifying whether information is safe or unsafe to be shared online. Learning to be respectful of others when sharing online and ask for their permission before sharing content. Learning strategies for checking if something they read online is true. When using the internet to search for images, learning what to do if they come across something online that worries them or makes them feel uncomfortable.	

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Computing Systems and networks		To be able to understand what a computer keyboard is and recognising some letters and numbers. To know that a mouse can be used to click, drag and create simple drawings. To know that different types of technology can be found at home and in school. To know that you can take simple photographs with a camera or iPad.	To know that "log in and log out" means to begin and end a connection with a computer. To know that a computer and mouse can be used to click, drag, fill and select and also add backgrounds, text, layers, shapes and clip art. To know that passwords are important for security. To know that when we create something on a computer it can be more easily saved and shared than a paper version. To know some of the simple graphic design features of a piece of online software.	To know the difference between a desktop and laptop computer. To know that people control technology. To know that buttons are a form of input that give a computer an instruction about what to do (output). To know that computers often work together. To know that touch typing is the fastest way to type. To know that I can make text a different style, size and colour. To know that "copy and paste" is a quick way of duplicating text.	

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Online Safety	Know and talk about the different factors that support their overall health and wellbeing: sensible amounts of 'screen time'.		To know that the internet is many devices connected to one another. To know that you should tell a trusted adult if you feel unsafe or worried online. To know that people you do not know on the internet (online) are strangers and are not always who they say they are. To know that to stay safe online it is important to keep personal information safe. To know that 'sharing' online means giving something specific to someone else via the internet and 'posting' online means placing information on the internet.	To understand the difference between online and offline. To understand what information I should not post online. To know what the techniques are for creating a strong password. To know that you should ask permission from others before sharing about them online and that they have the right to say 'no'. To understand that not everything I see or read online is true.	

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Key Vocabulary	Computer I-pad Interactive Whiteboard Camera Keyboard Mouse Telephone On / Off / Online Screen Screen-time Stop / Start Instruction	Computer Computer tower Monitor Keyboard Mouse Letters Numbers Uppercase / Lowercase Type Computer safety Protect Secure / Security Lock / Personal Left-click / Right-click Arrow / Cursor Instructions Blindfold Step over Walk around / Turn Left / Right To the side Straight on Stand still Stop / Duck Under / Bend down Walk / Hop / Tiptoe Shuffle / Skip Run / Timer Describe / Adjective	Account / Clipart Computer Log on/off Password Resize Screen (monitor) Software / Tools Username / Algorithm Bug / Computer Debug / Decompose Device / Input Instructions / Output Solution / Computer Program / Create Data / Digital content E-document / Folder List / Save / Sequence Share Spreadsheet Bee-Bot Computing code Computer program Explain / Explore / Predict Tinker Video Crop / Delete / Download Drag and drop Editing software Image / Import	Battery Buttons Computer Desktop Device Electricity Invention Laptop Technology / Wire Artificial intelligence (AI) Correct / Data Debug / Decompose Error / Key features Loop / Predict Unnecessary backspace Copyright / Image Import Keyboard character Paste / Undo / Redo Touch typing Animation Bug / Code Icon / Imitate Instructions Sequence Animator Storyboard Contraption Upload Decompose	

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		Two-part instructions Algorithm Instructions Order / Sequence Predict / Prediction Next / Last / First Second / Third USB stick System fan Hard drive / Monitor Computer tower Speaker Click / Dial Memory Technology Power / Electricity Batteries Camera iPad / Tablet Lens / Point Shoot / Capture Picture / Image Gallery / Record Photograph Photographer Still Blurred Blurry / Crisp Clear	Resize / Save as Search engine Smart device Storage space Visual effects Categorise Chart Computer information Label Pictogram Record Sort Table Text Communicate Connect / Devices Digital footprint Emotion / Feelings Internet Internet safety Online Personal information Posting Respect / Sharing Smart device Strangers Trust Wired Wireless	Design Download Film review Filming Import / Image Plan / Sketch Software Stop-motion Approximate Astronaut Data / Digital content Experiment Interactive map Laboratory Monitor (verb) Satellite Sensor Space Survival Thermometer Accept Consent Content Offline / Online Password Permission Personal information Terms and conditions Trusted adult	

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	Year 3	Year 4	Year 5	Year 6	End of Key Stage 2
Hardware		Understanding what the different components of a computer do and how they work together. Drawing comparisons across different types of computers. Learning about the purpose of routers. Using chroma key (green screen) technology to change a background. Understanding that weather stations use sensors to gather and record data which predicts the weather.	Learning that external devices can be programmed by a separate computer. Learning the difference between ROM and RAM. Recognising how the size of RAM affects the processing of data. Understanding the fetch, decode, execute cycle. Learning about the history of computers and how they have evolved over time. Using the understanding of historic computers to design a computer of the future.	Understanding and identifying barcodes, QR codes and RFID. Identifying devices and applications that can scan or read barcodes, QR codes and RFID. Understanding how corruption can happen within data during transfer (for example when downloading, installing, copying and updating files).	Pupils should be taught to: 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.

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Knowledge Skills and Concepts

Networks and data representation		Understanding that computer networks provide multiple services, such as the World Wide Web, and opportunities for communication and collaboration. Understanding the role of the key components of a network. Identifying the key components within a network, including whether they are wired or wireless. Understanding that websites and videos are files that are shared from one computer to another. Learning about the role of packets. Understanding how networks work and their purpose.	Learning the vocabulary associated with data: data and transmit. Learning how the data for digital images can be compressed. Recognising that computers transfer data in binary and understanding simple binary addition. Relating binary signals (Boolean) to the simple character-based language, ASCII. Learning that messages can be sent by binary code, reading binary up to eight characters and carrying out binary calculations. Understanding how bit patterns represent images as pixels.	Understanding that computer networks provide multiple services.	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,

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		Recognising links between networks and the internet. Learning how data is transferred.			evaluating and presenting data and information. Use technology safely, respectfully and responsibly; recognise

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Computational thinking	Using decomposition to explore the code behind an animation. Using repetition in programs. Using logical reasoning to explain how simple algorithms work. Explaining the purpose of an algorithm. Forming algorithms independently. Using decomposition to solve a problem by finding out what code was used. Using decomposition to understand the purpose of a script of code. Identifying patterns through unplugged activities.	Using decomposition to explain the parts of a laptop computer. Explaining the purpose of an algorithm.	Decomposing a program without support. Predicting how software will work based on previous experience. Using past experiences to help solve new problems. Writing increasingly complex algorithms for a purpose.	Decomposing a program into an algorithm. Decomposing animations into a series of images. Decomposing a story to be able to plan a program to tell a story. Predicting how software will work based on previous experience. Writing increasingly complex algorithms for a purpose.	acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.

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	Using past experiences to help solve new problems. Using abstraction to identify the important parts during both plugged and unplugged activities.				

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Programming	Using logical thinking to explore more complex software; predicting, testing and explaining what it does. Incorporating loops to make code more efficient. Continuing existing code. Making reasonable suggestions for how to debug their own and others' code. Creating algorithms for a specific purpose. Coding a simple game. Using abstraction and pattern recognition to modify code. Incorporating variables to make code more efficient.	Using logical thinking to explore more complex software; predicting, testing and explaining what it does. Remixing existing code. To know what a conditional statement is in programming. To understand that variables can help you to create a quiz on Scratch. To know that combining computational thinking skills (sequence, abstraction, decomposition etc) can help you to solve a problem. To understand that pattern recognition means identifying patterns to help them work out how the code works. To understand that algorithms can be used for a number of purposes e.g.	Programming an animation. Iterating and developing their programming as they work. Confidently using loops in programming. Using a more systematic approach to debugging code, justifying what is wrong and how it can be corrected. Writing code to create a desired effect. Using a range of programming commands. Using repetition within a program. Predicting code and adapting it to a chosen purpose. Changing a program to personalise it. Evaluating code to understand its purpose.	Debugging quickly and effectively to make a program more efficient. Remixing existing code to explore a problem. Using and adapting nested loops. Programming using the language Python. Changing a program to personalise it. Evaluating code to understand its purpose. Amending code within a live scenario. Iterating and developing their programming as they work. Confidently using loops in programming. Using a more systematic approach to debugging	

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	Remixing existing code. To know that Scratch is a programming language and some of its basic functions. To understand how to use loops to improve programming. To understand how decomposition is used in programming. To understand that you can remix and adapt existing code. To understand that a variable is a value that can change (depending on conditions) and know that you can create them in Scratch.	animation, games design etc.	Debugging quickly and effectively to make a program more efficient. Remixing existing code to explore a problem. To know that a Micro:bit is a programmable device. To know that Micro:bit uses a block coding language similar to Scratch. To understand and recognise coding structures including variables. To know what techniques to use to create a program for a specific purpose (including decomposition).	code, justifying what is wrong and how it can be corrected. Writing code to create a desired effect. Using a range of programming commands. Using repetition within a program. To know that there are text-based programming languages such as Logo and Python. To know that nested loops are loops inside of loops. To understand the use of random numbers and remix Python code. To know that a soundtrack is music for a film/video and that one way of composing	

				these is on programming software. To understand that using loops can make the process of writing music simpler and more effective. To know how to adapt their code while performing their music.	

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Using Software	Taking photographs and recording video to tell a story. Using software to edit and enhance their video adding music, sounds and text on screen with transitions. Designing and creating a webpage for a given purpose. Building a web page and creating content for it. Using software to work collaboratively with others.	Building a web page and creating content for it. Use online software for documents, presentations, forms and spreadsheets. Using software to work collaboratively with others.	Using logical thinking to explore software more independently, making predictions based on their previous experience, iterating ideas and testing continuously. Identify ways to improve and edit programs, videos, images etc. Using search and word processing skills to create a presentation. Independently learning how to use 3D design software package TinkerCAD. Creating and editing sound recordings for a specific purpose. Creating and editing videos, adding multiple elements: music, voiceover, sound, text and transitions.	Using logical thinking to explore software more independently, making predictions based on their previous experience, iterating ideas and testing continuously. Identify ways to improve and edit programs, videos, images etc. Using search and word processing skills to create a presentation. Using software programme Sonic Pi/Scratch to create music. Using video editing software to animate.	

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			Using design software TinkerCAD to design a product. Creating a website with embedded links and multiple pages.		
Using email and internet searches	Learning to log in and out of an email account. Writing an email including a subject, 'to' and 'from.' Sending an email with an attachment. Replying to an email.	Understanding why some results come before others when searching. Using keywords to effectively search for information on the internet. Understanding that information found by searching the internet is not all grounded in fact. Searching the internet for data.	Understanding how search engines work.	Developing searching skills to help find relevant information on the internet. Learning how to use search engines effectively to find information, focussing on keyword searches and evaluating search returns.	

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Using Data	To know that a database is a collection of data stored in a logical, structured and orderly manner. To know that computer databases can be useful for sorting and filtering data. To know that different visual representations of data can be made on a computer.	Understanding the vocabulary associated with databases: field, record, data. Learning about the pros and cons of digital versus paper databases. Sorting and filtering databases to easily retrieve information. Creating and interpreting charts and graphs to understand data. Understanding that data is used to forecast weather. Recording data in a spreadsheet independently. Sorting data in a spreadsheet to compare using the 'sort by…' option.	Understanding how data is collected in remote or dangerous places. Understanding how data might be used to tell us about a location. To know that Mars Rover is a motor vehicle that collects data from space by taking photos and examining samples of rock. To know what numbers using binary code look like and be able to identify how messages can be sent in this format. To understand that RAM is Random Access Memory and acts as the computer's working memory. To know what simple operations can be used to calculate bit patterns.	Understanding how barcodes, QR codes and RFID work. Gathering and analysing data in real time. Creating formulas and sorting data within spreadsheets. To know that data contained within barcodes and QR codes can be used by computers. To know that infrared waves are a way of transmitting data. To know that Radio Frequency Identification (RFID) is a more private way of transmitting data. To know that data is often encrypted so that even if it is stolen it is not useful to the thief.	

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		Designing a device which gathers and records sensor data. To know that computers can use different forms of input to sense the world around them so that they can record and respond to data. This is called 'sensor data'. To know that a weather machine is an automated machine that responds to sensor data. To understand that "green screen technology' is a green background in front of which moving subjects are filmed. This allows a separately filmed background to be added to the final image.		To know that data can become corrupted within a network but this is less likely to happen if it is sent in 'packets'. I know that devices or that are not updated are most vulnerable to hackers. To know the difference between mobile data and WiFi.	

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Wider use of technology	Understanding the purpose of emails. Recognising how social media platforms are used to interact.	Understanding that software can be used collaboratively online to work as a team.	Learn about different forms of communication that have developed with the use of technology.	Learning about the Internet of Things and how it has led to 'big data'. Learning how 'big data' can be used to solve a problem or improve efficiency. Learn about different forms of communication that have developed with the use of technology.	

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Digital Literacy	Recognising that different information is shared online including facts, beliefs and opinions. Learning how to identify reliable information when searching online. Learning how to stay safe on social media. Considering the impact technology can have on mood. Learning about cyberbullying. Learning that not all emails are genuine, recognising when an email might be fake and what to do about it.	Recognising that information on the internet might not be true or correct and that some sources are more trustworthy than others. Learning to make judgements about the accuracy of online searches. Identifying forms of advertising online. Recognising what appropriate behaviour is when collaborating with others online. Reflecting on the positives and negatives of time spent online. Identifying respectful and disrespectful online behaviour.	Identifying possible dangers online and learning how to stay safe. Evaluating the pros and cons of online communication. Recognising that information on the internet might not be true or correct and learning ways of checking validity. Learning what to do if they experience bullying online. Learning to use an online community safely. Using search engines safely and effectively. Understanding the importance of secure passwords and how to create them.	Learning about the positive and negative impacts of sharing online. Learning strategies to create a positive online reputation. Understanding the importance of secure passwords and how to create them. Learning strategies to capture evidence of online bullying in order to seek help. Recognising that updated software can help to prevent data corruption and hacking. Recognising that information on the internet might not be true or correct and learning ways of checking validity.	

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Computing Systems and networks	•To know what a tablet is and to understand that email stands for 'electronic mail'. To know that an attachment is an extra file added to an email. To understand that emails should contain appropriate and respectful content. To know that cyberbullying is bullying using electronics such as a computer or phone.	To understand that software can be used collaboratively online to work as a team. To know what type of comments and suggestions on a collaborative document can be helpful. To know that you can use images, text, transitions and animation in presentations. To know what a tablet is and how it is different from a laptop/desktop computer. To understand what a network is and how a school network might be organised. To know that a server is central to a network and responds to requests made.	To know the difference between ROM and RAM. To understand the importance of having a secure password and what "brute force hacking" is. To know that the first computers were created at Bletchley park to crack the Enigma cose to help the war effort in World War 2. To know about some of the historical figures that contributed to technological advances in computing. To understand what techniques are required to create a presentation using appropriate software.	To know how search engines work. To understand that anyone can create a website and therefore we should take steps to check the validity of websites. To know that web crawlers are computer programs that crawl through the internet. To understand what copyright is.	

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		To know how the internet uses networks to share files. To know that a router connects us to the internet. To know what a packet is and why it is important for website data transfer. To know the roles that inputs and outputs play. To know what some of the different components inside a computer are e.g. CPU, RAM, hard drive, and how they work together.			

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Online Safety	To know that not everything on the internet is true: people share facts, beliefs and opinions online. To understand that the internet can affect your moods and feelings. To know that privacy settings limit who can access your important personal information Information, such as your name, age, gender etc. To know what social media is and that age restrictions apply.	To understand some of the methods used to encourage people to buy things online. To understand that technology can be designed to act like or impersonate living things. To understand that technology can be a distraction and identify when someone might need to limit the amount of time spent using technology. To understand what behaviours are appropriate in order to stay safe and be respectful online.	To know different ways we can communicate online. To understand how online information can be used to form judgements. To understand some ways to deal with online bullying. To know that apps require permission to access private information and that you can alter the permissions. To know where I can go for support if I am being bullied online or feel that my health is being affected by time online.	To know that a 'digital footprint' means the information that exists on the internet as a result of a person's online activity. To know what steps are required to capture bullying content as evidence. To understand that it is important to manage personal passwords effectively. To understand what it means to have a positive online reputation. To know some common online scams.	

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Key Vocabulary	Device / File Internet / Network Network map Network switch Router / Server Submarine cables The cloud / Wi-fi Wired / Wireless Wireless access Pointanimation Sprite Application / Tinker Code / Code block Debug / Decompose Interface / Loop Predict / Program Remixing code Repetition code Review account Password Attachment Username BCC / Spam / CC Computer Cyberbullying Domain Email / Email account Emoji / Information Log off / Log on	Categorise Data / Database Fields / Filter Graphs and charts Information / Record Sort / Spreadsheet Accurate Age restricted Autocomplete Beliefs / Block Content / Digital devices Fact / Fake news Opinion Privacy settings Reliable / Report Requests / Search engine Security questions Smart devices Social media platforms Social networking Collaborate / Spreadsheet Comment / Transition e-Document / Edit Email / Icon Insert (file) / Link Presentation software Presentation / Reply Reviewing comments	Algorithm / Company logo Data leak / Data privacy Inaccurate information Index / Keywords Network / Online Page rank / TASK Web crawler / Website WWW / Basic commands Tinker / Bug / Debug Code (computer and verb) Error / Live loop / Loop Pitch / Program language Rhythm / Soundtrack Tempo / Timbre Binary code / Data Sequence Data transmission Discovery / Signal Distance / Simulation Input / Space (astronomy) Moon / Numerical data Output / Planet Radio signal / Scientist .hex file / Variable .zip file / Bluetooth Code blocks / Decompose Emulator / Feature Loop / Pedometer Predict / Systematic	Acrostic code Brute force Hacking Caesar cipher / Cipher Encrypt / Invention Nth letter cipher Password Pigpen cipher Technological advancement Trial and error Algorithm Code (computer) Computer command Decompose /Import Loop / Nested loop Random numbers Remix / Script Libraries Variable barcode Signal / Boolean Systems or data Brand / Analyst Commuter / Transmission Contactless Data / Data privacy Encrypt / Infrared waves NFC / QR code Radio waves / RFID Background noise	

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Progression of Computing
Knowledge Skills and Concepts

	Algorithm Computer program Data / Desktop Instructions ROM / Tablet device Track pad / Application Voice / Desktop Voiceover Digital device Edit Film / Film editing Software / Graphics Import / Key events Laptop / Plan Recording Sound effects Time code	Share / Code / Code block Conditional statement Decompose / Direction Feature / Icon Orientation / Position Program / Project Stage / Tinker Variable / Collaboration Tab / Content Website / Create WWW / Design Edit / Embed Feature / Header Hyperlink / Insert (file) Online / Plancode Content / Copyright CSS / Hacker Hex code Internet browser Permission / Script URL / Web page Abstraction / Algorithm Design / Code Code blocks / Computer Decompose problem Algorithm / Temperature Automated machine Calculate / Weather Climate / Device	Tinker Animation / Animator Background / Decompose Design / Digital device Duplicate / Editing Frame / Illusion Onion / Skinning Stop-motion / Storyboard Upload algorithm Binary image Bit / Bit pattern CAD / Data / Encode Image / JPEG Memory / Computer Operating system Pixels / Application 'app' Anonymity / Bullying Emoji / Gif / Hacked Interpreted / Judgement Meme / Mental health Misinterpreted / Permissions Reliable / Reputation	Byte / Computer CPU /Memory storage Mouse / OS Radio play RAM / ROM Sound effects Touch screen Trackpad / Big data Bluetooth / Corrupt data Digital revolution GPS / Infrared waves IoT / SIM Computer simulation Smart school/city Anonymity Anti-virus software Digital footprint Digital personality Malware Online reputation Peer-pressure /Permission Phishing / Privacy settings Report / Scammers Screengrab / Selfie Software update Two-factor authentications	

St Mary's Catholic Primary School and Nursery

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		Forecast / Log data Predict / Record Sensor / Source Spreadsheet Ad / Advertisement Accuracy / Alter Belief / Bot / Chatbot Fact / Fake Gaming In-app purchases Influencer / Implication Judgement Live streaming Opinion / Pop ups Reliable / Respectful Search engine Social media Snippet / Sponsored			