

# Cheetwood Community Primary School



Computing Skills, Knowledge and Knowledge Categories

Year group	Term	Scheme of Work	Skills (What do we want them to do by the end of the unit?)	Knowledge (what are the 3(EYFS), 4 – 5 (KS1), 5-6 (KS2) pieces of knowledge by the end of the unit?)	Knowledge Categories
<p>It is important in the EYFS that we give children a broad, play-based experience of ICT in a range of contexts, including outdoor play. Computing is not just about computers. Early years learning environments should feature ICT scenarios based on experience in the real world, such as in role play. Children gain confidence, control and language skills through opportunities to explore using non-computer based resources such as programmable toys, controllable traffic lights and walkie-talkie sets. Recording devices can support children to develop their communication skills. This is particularly useful with children who have English as an additional language.</p>					
Nursery			<p>To begin to recognise different devices within the environment (IPad, Camera, Phone, Whiteboard)</p> <p>With support, I can take a picture on a device</p> <p>I can follow a one-step instruction (no technology)</p> <p>I can talk about and use ‘make believe’ technology in play.</p>	<p>I know the name of different devices</p> <p>I am beginning to know how to collect data</p> <p>With adult support, I know how to understand data</p>	<p>Computer Systems and Networks</p> <p>Data Handling</p> <p>Programming</p>
Reception			<p>I can operate a camera to take photos and videos.</p> <p>I can recognise and compare digital devices</p> <p>I can complete a repeated pattern</p>	<p>I know how a pattern works and can fill in missing parts</p> <p>I know how to collect and analyse data</p> <p>I know that we use a phone to communicate with those not in the same location</p>	<p>Computer Systems and Networks</p> <p>Programming</p> <p>Data Handling</p>

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			<p>I can follow a two-step instruction (no technology)</p> <p>I can collect data</p>	<p>I know that by following an instruction it will result in an outcome (beebots/ positional grids)</p> <p>I know some of the ways we can use the internet.</p> <p>I know what to do if you feel unsafe or worried (online) – tell a trusted adult.</p>	
1	Autumn	Improving mouse skills	<p>I can explore and tinker with hardware to find out how it works.</p> <p>I can use a basic range of tools within graphic editing software.</p> <p>I can control the mouse through dragging, clicking and resizing images to create different effects.</p> <p>I can begin to understand the use of different software tools.</p> <p>I can recognise devices that are connected to the internet.</p> <p>I can log in and out of a computer and save work on my own account.</p>	<p>I know where keys are located on the keyboard.</p> <p>I know that “login” and “logout” means to begin and end a connection with a computer.</p> <p>I know that a computer and a mouse can be used to click, drag, fill and select and also add backgrounds, text, layers, shapes and clip art.</p> <p>I know that passwords are important for security and to keep us safe.</p>	Computer Systems and Networks

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		Algorithms unplugged	<p>I can use decomposition to solve unplugged challenges.</p> <p>I can develop skills associated with sequencing in unplugged activities.</p> <p>I can follow and assemble instructions into a simple algorithm.</p> <p>I can debug instructions when things go wrong.</p> <p>I can debug an algorithm in an unplugged scenario.</p>	<p>I know that some devices are input devices and others are output devices.</p> <p>I know that an algorithm is when instructions are put in an exact order.</p> <p>I know that decomposition means breaking a problem into manageable chunks and that it is important in computing.</p> <p>I know that we call errors in an algorithm 'bugs' and fixing these 'debugging'.</p>	Programming
	Spring	Rocket to the moon	<p>I can use logical reasoning to predict the behaviour of simple programs.</p> <p>I can develop the skills associated with sequencing in unplugged activities.</p> <p>I can use a basic range of tools within graphic editing software.</p> <p>I can take and edit photographs.</p> <p>I can understand the use of different software tools.</p>	<p>I know that when we create something on a computer it can be more easily saved and shared than a paper version.</p> <p>I know some of the simple graphic design features of a piece of online software.</p> <p>I know that technology can be used to represent data in different ways: pictograms, tables, pie charts, bar charts, block graphs etc.</p> <p>I know that a spreadsheet is an electronic 'table' for sorting data.</p>	Skills Showcase

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		Programming Bee-bots	<p>I can use decomposition to solve unplugged challenges.</p> <p>I can use logical reasoning to predict the behaviour of simple programs.</p> <p>I can program a floor robot to follow a planned route.</p> <p>I can start to debug a set of instructions when things go wrong.</p> <p>I can use programming language to explain how a floor robot works.</p>	<p>I know the basic functions of a Bee-Bot.</p> <p>I know that you can use a camera/tablet to make simple videos.</p> <p>I know that algorithms move a Bee-Bot accurately to a chosen destination.</p>	Programming
	Summer	Digital imagery	<p>I can use a basic range of tools within graphic editing software.</p> <p>I can take and edit photographs.</p> <p>I can control the mouse through dragging, clicking and resizing of images to create different effects.</p> <p>I am developing my understanding of different software tools.</p> <p>I can search and download images from the internet safely.</p>	<p>I know that holding the camera or device still and considering angles and light are important to take good pictures.</p> <p>I know that I can edit, crop and filter photographs.</p> <p>I know how search engines work and how to search safely for images online.</p> <p>When using the internet to search for images, I know what to do if I come across something online that worries me or makes me feel uncomfortable.</p>	Creating Media

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		Introduction to data	<p>I can use data representations to answer questions about data.</p> <p>I can use software to explore and create pictograms and branching databases.</p>	<p>I know that technology can be used to represent data in different ways: pictograms, tables, pie charts, bar charts, block graphs etc.</p> <p>I know that charts and pictograms can be created using a computer.</p> <p>I know that a branching database is a way of classifying a group of objects.</p> <p>I know that computers understand different types of 'input'.</p>	Data Handling
	All Year	Online Safety	<p>I can recognise devices that are connected to the internet.</p> <p>I know how to interact safely with others online.</p> <p>I can recognise how actions on the internet can affect others.</p> <p>I can recognise what a digital footprint is and how to be careful about posting online.</p>	<p>I know that we are connected to others when using the internet.</p> <p>I know that the internet is many devices connected to one another.</p> <p>I know that people you do not know on the internet (online) are strangers and are not always who they say they are.</p> <p>I know that to stay safe online it is important to keep personal information safe.</p> <p>I know that 'sharing' online means giving something specific to someone else via the internet and 'posting' online means placing information on the internet.</p>	Online Safety

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2	Autumn	What is a computer?	<p>I can recognise and explain the difference between input and output devices</p> <p>I can label the different components of a computer.</p> <p>I can recognise that buttons cause effects and that technology follows instructions.</p> <p>I can explain how we know that technology is doing what we want it to do via its output.</p> <p>I can use greater control when taking photos with cameras, tablets or computers.</p> <p>I can discuss how computers are used in the wider world</p>	<p>I know the difference between a desktop and laptop computer.</p> <p>I know that people control technology.</p> <p>I know some input devices that give a computer an instruction about what to do (output).</p> <p>I know that computers often work together.</p>	
		Algorithms and debugging	<p>I can decompose a game to predict the algorithms used to create it.</p> <p>I can explain and follow algorithms.</p> <p>I can create a clear and precise algorithm.</p> <p>I can use programs that execute by following precise instructions.</p>	<p>I know what machine learning is and how it enables computers to make predictions.</p> <p>I know that loops in programming are where you set a certain instruction (or instructions) to be repeated multiple times.</p> <p>I know that abstraction is the removing of unnecessary detail to help solve a problem.</p>	Programming

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			<p>I can incorporate loops within algorithms.</p> <p>I can use logical thinking to explore software, predicting, testing and explaining what it does.</p> <p>I can use an algorithm to write a basic computer program.</p>		
	Spring	Word Processing	<p>I can be more confident with the keyboard and the basics of touch typing.</p> <p>I can develop my word processing skills, including altering text, copying and pasting and using keyboard shortcuts.</p> <p>I can use word processing software to type and reformat text.</p> <p>I can search for appropriate images to use in a document.</p> <p>I can explain what online information is.</p> <p>I can identify whether information is safe or unsafe to be shared online.</p>	<p>I know that touch typing is the fastest way to type.</p> <p>I know that I can make text a different style, size and colour.</p> <p>I know that “copy and paste” is a quick way of duplicating text.</p> <p>I know what online information is.</p>	Computer Systems and Networks



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		Programming : Scratch Jr	<p>I can use loops within algorithms.</p> <p>I can use logical thinking to explore software, predicting, testing and explaining what it does.</p> <p>I can use an algorithm to write a basic computer program.</p> <p>I can use loop blocks when programming to repeat an instruction more than once.</p> <p>I can use software to create story animations.</p>	<p>I know that coding is writing in a special language so that the computer understands what to do.</p> <p>I understand that the character in ScratchJr is controlled by the programming blocks.</p> <p>I know that you can write a program to create a musical instrument or tell a joke.</p> <p>I know that buttons cause effects and that technology follows instruction.</p>	Programming
	Summer	Stop Motion	<p>I can use greater control to take more precise photos with cameras, tablets or computers.</p> <p>I can use logical thinking to explore software, predicting, testing and explaining what it does.</p>	<p>I know that an animation is made up of a sequence of photographs.</p> <p>I know that small changes in my frames will create a smoother looking animation.</p> <p>I know which software creates simple animations and some of its features e.g. onion skinning.</p>	Creating Media
		International Space Station	<p>I can create and label images.</p> <p>I can collect and input data into a spreadsheet.</p> <p>I can interpret data from a spreadsheet.</p>	<p>I know that you can enter simple data into a spreadsheet.</p> <p>I know data is used to answer certain questions.</p> <p>I know that computers can be used to monitor supplies.</p>	Data Handling

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			<p>I can present data in different ways on a spreadsheet.</p> <p>I can answer questions by interpreting data in a spreadsheet.</p> <p>I can explain how computers are used in the wider world.</p>		
	All Year	Online Safety	<p>I can identify whether information is safe or unsafe to be shared online.</p> <p>I can create a strong password.</p> <p>I can explain how to be respectful of others when sharing online.</p> <p>I can understand the importance of asking permission before sharing specific content online.</p> <p>I can explain strategies I can use for checking if something I read online is true.</p> <p>I can explain 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.</p>	<p>I know the difference between online and offline.</p> <p>I know what information I should not post online.</p> <p>I know what the techniques are for creating a strong password.</p> <p>I know that you should ask permission from others before sharing about them online and that they have the right to say 'no.'</p> <p>I know that not everything I see or read online is true.</p>	Online Safety
3	Autumn	Networks	I can explain the role of the key components of a network.	I know that a network is a group of interconnected devices.	Computer Systems and Networks

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			<p>I can explain how websites and videos are files that are shared from one computer to another.</p> <p>I can identify the key components within a network, including whether they are wired or wireless.</p> <p>I can explain how data is transferred.</p>	<p>I know the components that make up a network (Wireless access point/WAP, Network switch, Router, Server and devices).</p> <p>I know that a server is central to a network and responds to requests made.</p> <p>I know that the internet connects all the networks around the world.</p>	
		Programming : Scratch	<p>I can use decomposition to explore the code behind an animation.</p> <p>I can use repetition in programs. I can explain the purpose of an algorithm. Forming algorithms independently.</p> <p>I can use logical thinking to explore more complex software; predicting, testing and explaining what it does.</p> <p>I can incorporate loops to make code more efficient.</p> <p>I can continue an existing code.</p> <p>I can make reasonable suggestions for how to debug my own and others' code.</p>	<p>I know Scratch is a programming language and some of its basic functions.</p> <p>I know how to use loops to improve programming.</p> <p>I know how decomposition is used in programming.</p> <p>I know that you can remix and adapt existing code.</p>	Programming

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	Spring	Emailing	<p>I can log in and out of an email account.</p> <p>I can write an email including a subject, 'to' and 'from'.</p> <p>I can send an email with an attachment.</p> <p>I can reply to an email.</p>	<p>I know that not all emails are genuine, recognising when an email might be fake and what to do about it.</p> <p>I know that email stands for 'electronic mail.'</p> <p>I know that an attachment is an extra file added to an email.</p> <p>I know that emails should contain appropriate and respectful content.</p>	Computer Systems and Networks
		Journey inside a computer	<p>I can explain what the different components of a computer do and how they work together.</p> <p>I can draw comparisons across different types of computers.</p> <p>I can use decomposition to explain the parts of a laptop computer.</p>	<p>I know the roles that inputs and outputs play on computers.</p> <p>I know what some of the different components inside a computer are e.g. CPU, RAM, hard drive, and how they work together.</p> <p>I know what a tablet is and how it is different from a laptop/desktop computer.</p>	Computer Systems and Networks
	Summer	Video Trailers	<p>I can use logical thinking to explore more complex software; predicting, testing and explaining what it does.</p> <p>I can take photographs and record a video to tell a story.</p> <p>I can use software to edit and enhance their video adding music and text on screen with transitions.</p>	<p>I know that different types of camera shots can make my photos or videos look more effective.</p> <p>I know that I can edit photos and videos using film editing software.</p> <p>I know that I can add transitions and text to my video</p>	Creating Media

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		Comparison Cards Databases	<p>I can use the vocabulary associated with databases: field, record, data.</p> <p>Learning about the pros and cons of digital versus paper databases.</p> <p>I can sort and filter databases to easily retrieve information.</p> <p>I can create and interpret charts and graphs to understand data.</p>	<p>I know that a database is a collection of data stored in a logical, structured and orderly manner.</p> <p>I know that computer databases can be useful for sorting and filtering data.</p> <p>I know that different visual representations of data can be made on a computer.</p>	Data Handling
	All Year	Online Safety	<p>I can recognise how social media platforms are used to interact.</p> <p>I can recognise that different information is shared online, including facts, beliefs and opinions.</p> <p>I can identify reliable information when searching online.</p> <p>I can stay safe on social media.</p>	<p>I know that not everything on the internet is true: people share facts, beliefs and opinions online.</p> <p>I know the internet can affect people's moods and feelings.</p> <p>I know that privacy settings limit who can access important personal information, such as names, ages, gender etc.</p> <p>I know what social media is and that age restrictions apply.</p>	Online Safety

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4	Autumn	Collaborative Learning	<p>I can use online software for documents, presentations, forms and spreadsheets (google - Docs, Forms, Sheets, Slides).</p> <p>I can use software to work collaboratively with others.</p> <p>I can recognise what appropriate behaviour is when collaborating with others online.</p>	<p>I know that software can be used collaboratively online to work as a team.</p> <p>I know what type of comments and suggestions on a collaborative document can be helpful.</p> <p>I know that you can use images, text, transitions and animation in presentation slides.</p> <p>I know that computer networks provide multiple services, such as the World Wide Web.</p>	Computer Systems and Networks
		Further Coding with Scratch	<p>I can create algorithms for a specific purpose.</p> <p>I can use code to create a simple game</p> <p>I can incorporate variables to make code more efficient.</p>	<p>I know that a variable is a value that can change (depending on conditions) and know that you can create them in Scratch.</p> <p>I know what a conditional statement is in programming.</p> <p>I know how to use decomposition to solve a problem by finding out what code was used.</p> <p>I know what decomposition is and the purpose of a script code.</p> <p>I know that variables can help you to create a quiz on Scratch.</p>	Programming

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	Spring	Website Design	<p>I can design and create a webpage for a given purpose.</p> <p>I can use software to work collaboratively with others.</p>	<p>I know that a website is a collection of pages that are all connected.</p> <p>I know that websites usually have a homepage and subpages as well as clickable links to new pages, called hyperlinks.</p> <p>I know how to build a web page and create content for it.</p> <p>I know that websites should be informative and interactive.</p>	Creating Media
		HTML	<p>I can remix existing code.</p> <p>I can build a web page and create content for it.</p> <p>I can identify examples of HTML tags.</p>	<p>I know that information found by searching the internet is not all grounded in fact.</p> <p>I know what changing the HTML and CSS does to alter the appearance of an object on the web.</p> <p>I know that copyright means that those images are protected and to understand that we should do a “creative commons” image search if we wish to use images from the internet.</p> <p>I know what “fake news” is and ways to spot websites that carry this type of misinformation.</p> <p>I know what the “inspect” elements tool is and ways of using it to explore and alter text and images.</p>	

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	Summer	Computational Thinking	<p>I can identify patterns through unplugged activities.</p> <p>I can use past experiences to help solve new problems.</p> <p>I can use abstraction to identify the important parts when completing both plugged and unplugged activities.</p> <p>I can use abstraction and pattern recognition to modify code.</p>	<p>I know that combining computational thinking skills can help you to solve a problem.</p> <p>I know that pattern recognition means identifying patterns to help them work out how the code works.</p> <p>I know that algorithms can be used for a number of purposes e.g. animation, games design etc.</p> <p>I know how to use decomposition to solve a problem by finding out what code was used.</p>	Programming
		Investigating Weather	<p>I can use tablets or digital cameras to film a weather forecast.</p> <p>I can use keywords to effectively search for information on the internet.</p> <p>I can design a device that gathers and records sensor data.</p> <p>I can record data in a spreadsheet independently.</p>	<p>I know that computers can use different forms of input to sense the world around them so that they can record and respond to data ('sensor data').</p> <p>I know that a weather machine is an automated machine that responds to sensor data.</p> <p>I know that weather forecasters use specific language, expression and pre-prepared scripts to help create weather forecast films.</p> <p>I know that data is used to forecast weather.</p>	Data Handling



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				I know that weather stations use sensors to gather and record data that predicts the weather.	
	All Year	Online Safety	<p>Understanding why some results come before others when searching.</p> <p>I can make judgments about the accuracy of online searches.</p> <p>I can identify forms of advertising online.</p> <p>I can reflect on the positives and negatives of time online.</p> <p>I can identify respectful and disrespectful online behaviour.</p> <p>I can recognise that information on the internet might not be true or correct and that some sources are more trustworthy than others.</p>	<p>I know some of the methods used to encourage people to buy things online.</p> <p>I know that technology can be designed to act like or impersonate living things.</p> <p>I know that technology can be a distraction and identify when someone might need to limit the amount of time spent using technology.</p> <p>I know what behaviours are appropriate in order to stay safe and be respectful online.</p> <p>I know that information found by searching the internet is not all grounded in fact.</p>	Online Safety
5	Autumn 1	Search Engines	<p>I can develop my searching skills to help find relevant information on the internet.</p> <p>I can use search engines effectively to find information, focussing on keyword searches and evaluating search returns.</p>	<p>I know that anyone can create a website and therefore we should take steps to check the validity of websites.</p> <p>I know that web crawlers are computer programs that crawl through the internet.</p> <p>I know what copyright is.</p>	Computer Systems and Networks

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			I can recognise that information on the internet might not be true or correct and learn ways of checking validity.		
		Programming Music	<p>I can predict how software will work based on previous experience.</p> <p>I can write more complex algorithms for a purpose.</p> <p>I can interact and develop my programming.</p> <p>I can confidently use loops in my programming.</p> <p>I can use a more systematic approach to debugging code, justifying what is wrong and how it can be corrected.</p> <p>I can write a code to create a desired effect and amend a code within a live scenario.</p> <p>I can use a range of programming commands and use repetition within a program.</p> <p>I can use logical thinking to explore software more independently, making predictions based on my previous experience.</p>	<p>I know that a soundtrack is music for a film/video and that one way of composing these is on programming software.</p> <p>I know that using loops can make the process of writing music simpler and more effective.</p> <p>I know how to adapt music while performing.</p>	Programming

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			<p>I can use a software programme (Scratch) to create music.</p> <p>I can identify ways to improve and edit programs, videos, images etc.</p>		
	Spring	Mars Rover	<p>I know that external devices can be programmed by a separate computer and that computers transfer data in binary and understand simple binary addition.</p> <p>I can recognise how the size of RAM affects the processing of data.</p> <p>I can relate binary signals (Boolean) to the simple character-based language, ASCII.</p> <p>I can send messages by binary code, read binary up to eight characters and carry out binary calculations.</p>	<p>I know that Mars Rover is a motor vehicle that collects data from space by taking photos and examining samples of rock.</p> <p>I know what numbers using binary code look like and be able to identify how messages can be sent in this format.</p> <p>I understand that RAM is Random Access Memory and acts as the computer's working memory.</p> <p>I know what simple operations can be used to calculate bit patterns.</p>	Data Handling
		Micro-Bit	<p>I can decompose a program without support.</p> <p>I can predict how software will work based on previous experience.</p> <p>I can write more complex algorithms for a purpose.</p> <p>I can program an animation.</p>	<p>I know that a Micro:bit is a programmable device.</p> <p>I know that Micro:bit uses a block coding language similar to Scratch.</p> <p>I understand and recognise coding structures including variables.</p>	Programming

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			<p>I can confidently use loops in my programming and develop as I work.</p> <p>I can use a more systematic approach to debugging code, justifying what is wrong and how it can be corrected.</p> <p>I can use logical thinking to explore software more independently, making predictions based on their previous experience.</p> <p>I can identify ways to improve and edit programs, videos, images etc.</p>	<p>I know what techniques to use to create a program for a specific purpose (including decomposition).</p>	
	Summer	Stop Motion	<p>I can decompose animations into a series of images.</p> <p>I can decompose a story to be able to plan a program to tell a story.</p> <p>I can use video editing software to animate.</p>	<p>I know that decomposition of an idea is important when creating stop-motion animations.</p> <p>I understand that stop motion animation is an animation filmed one frame at a time using models, and with tiny changes between each photograph.</p> <p>I know that editing is an important feature of making and improving a stop motion animation.</p>	Creating Media
		Mars Rover 2	<p>I can run instructions on the fetch, decode, execute cycle.</p>	<p>I know that bit patterns represent images as pixels.</p>	

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			<p>I can tell you how the data for digital images can be compressed.</p> <p>I can recognise that computers transfer data in binary and understand simple binary addition.</p> <p>I can use the 3D design software package, TinkerCAD.</p>	<p>I know that the data for digital images can be compressed.</p> <p>I know the difference between ROM and RAM.</p> <p>I know there are various techniques that will improve the design of a 3D object (using CAD software).</p> <p>I know the different forms of communication that have developed with the use of technology.</p>	
	All Year	Online Safety	<p>I can search for simple information about a person, such as their birthday or key life moments.</p> <p>I can recognise when health and wellbeing are being affected in either a positive or negative way through online use.</p> <p>I can recognise different types of online communication and evaluate the pros and cons of each</p>	<p>I know that passwords need to be strong and that apps require some form of passwords.</p> <p>I know the possible dangers online and know how to stay safe.</p> <p>I know that information on the Internet might not be true or correct and know ways of checking validity.</p> <p>I know how to use an online community safely.</p>	Online Safety
6	Autumn	Bletchley Park	<p>I can use past experiences to help solve new problems.</p> <p>I can write increasingly complex algorithms for a purpose.</p>	<p>I know what “brute force hacking” is.</p> <p>I know the history of computers and how they have evolved over time.</p>	Computer Systems and Networks

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			<p>I can debug quickly and effectively to make a program more efficient.</p> <p>I can remix existing code to explore a problem.</p> <p>I can change a program to personalise it.</p> <p>I can predict cose and evaluate it to suit a chosen purpose.</p>	<p>I know that the first computers were created at Bletchley Park to crack the Enigma code to help the war effort in World War 2.</p> <p>I know about some of the significant people that contributed to technological advances in computing.</p> <p>I know what techniques are required to create a presentation using appropriate software.</p>	
		Introduction to Python	<p>I can decompose a program into an algorithm.</p> <p>I can debug quickly and effectively to make a program more efficient &amp; remix existing code to explore a problem.</p> <p>I can use and adapt nested loops.</p> <p>I can use Python programming language.</p> <p>I can use logical thinking to explore software independently, iterating ideas and testing continuously.</p>	<p>I know that there are text-based programming languages such as Logo and Python.</p> <p>I know that nested loops are loops inside of loops.</p> <p>I know how to use random numbers and remix a Python code.</p> <p>I know how to debug algorithms to solve problems.</p>	Programming
	Spring	Big Data	<p>I can understand and identify barcodes, QR codes and Radio Frequency Identification (RFID) and how they work.</p>	<p>I know that RFID is a more private way of transmitting data.</p> <p>I know that data contained within barcodes and QR codes can be used by computers.</p>	Data Handling

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			<p>I can identify devices and applications that can scan or read barcodes, QR codes and RFID.</p> <p>I can gather and analyse data in real time</p> <p>I can create formulas and sort data within spreadsheets.</p>	<p>I know that infrared waves are a way of transmitting data.</p> <p>I know that data is often encrypted so that even if it is stolen it is not useful to the thief.</p> <p>I know how 'big data' can be used to solve a problem or improve efficiency.</p>	
		History of computers	<p>I can use my understanding of historic computers to design a computer of the future.</p> <p>I can plan, record and edit a radio play.</p> <p>I can create and edit sound recordings for a specific purpose.</p>	<p>I know about the history of computers and how they have evolved over time.</p> <p>I know that radio plays are plays where the audience can only hear the action so sound effects are important.</p> <p>I know that sound clips can be recorded, edited and trimmed using sound recording software.</p>	Creating media
	Summer	Big Data	<p>I can understand that computer networks provide multiple services.</p>	<p>I know that, during transfer, data can become corrupted within a network but this is less likely to happen if it is sent in 'packets'.</p> <p>I know that devices that are not updated are most vulnerable to hackers.</p> <p>I know the difference between mobile data and WiFi.</p> <p>I know about the Internet of Things and how it has led to 'big data'</p>	Data Handling

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		Inventing a product	<p>I can use logical thinking to explore software independently, iterating ideas and testing continuously.</p> <p>I can create and edit videos, adding multiple elements: music, voiceover, sound, text and transitions.</p> <p>I can use the design software TinkerCAD to design a product.</p> <p>I can create a website with embedded links and multiple pages.</p>	<p>I know what designing an electronic product involves.</p> <p>I know which programming software/language is best to achieve a purpose.</p> <p>I know the building blocks of computational thinking e.g. sequence, selection, repetition, variables and inputs and outputs.</p>	<p>Programming</p> <p>Creating media</p>
	All Year	Online Safety	<p>I can employ different strategies to create a positive online reputation.</p> <p>I can learn strategies to capture evidence of online bullying in order to seek help.</p>	<p>I know that a digital footprint means the information that exists on the internet as a result of a person's online activity.</p> <p>I know what steps are required to capture bullying content as evidence.</p> <p>I know that it is important to manage personal passwords effectively.</p> <p>I know what it means to have a positive online reputation.</p> <p>I know some common online scams.</p>	<p>Online Safety</p>