

# BISHOP LONSDALE CHURCH OF ENGLAND PRIMARY SCHOOL AND NURSERY

BECOMING INDEPENDENT SUCCESSFUL HONEST OPEN-MINDED PEOPLE

## Computing: Progression grid & vocabulary



End point(s)	Nursery	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<p><b>Computer science and programming</b></p> <p>1. To know how to use computational thinking approaches to plan, adapt, write and debug computer programs, using the vocabulary of computer science to explain a program's features and purpose.</p> <p>Key vocabulary to be introduced in each year.</p>	<p><b>To know the meaning of the terms:</b> pattern, repeat.</p> <p>To know that repeat means to do it again.</p> <p>To know that a pattern is something we can see repeating.</p> <p>To know how to spot simple patterns.</p>	<p><b>To know the meaning of the terms:</b> pattern, repeat, rules, instructions.</p> <p>To know that instructions are a list of things to do in order, to help you make or do something.</p> <p>To know that rules are things we have to do in a certain way.</p> <p>To know how to follow a simple set of oral instructions or a set of rules (algorithm).</p> <p>To know how to sequence simple, familiar tasks.</p>	<p><b>To know the meaning of the terms:</b> pattern, repeat, rules, instructions, sequence, algorithm, command.</p> <p>To know that sequence means arranging instructions for algorithms and programs in a particular order. (Patterns and algorithms / Controlling robots)</p> <p>To know that an algorithm is a set of rules or a precise sequence of instructions for performing a task. (Patterns and algorithms / Controlling robots)</p> <p>To know that a command is an action or order carried out as a step within a program. (Patterns and algorithms / Controlling robots)</p> <p>To know how to identify similarities between objects and groups of objects and sort them. (Patterns and algorithms)</p> <p>To know how to create and repeat patterns. (Patterns and algorithms)</p> <p>To know how to give, follow and write a simple set of instructions and begin to spot errors. (Patterns and algorithms / Controlling robots)</p>	<p><b>To know the meaning of the terms:</b> pattern, repeat, rules, instructions, sequence, algorithm, program, programming, debugging, tinkering.</p> <p>To know that programming is designing and writing programs for a computer. (Thinking like a computer / Control programs)</p> <p>To know that a program is an algorithm expressed in language that a computer understands (a code). (Thinking like a computer / Control programs)</p> <p>To know how to follow and give instructions in an accurate sequence. (Thinking like a computer / Control programs)</p> <p>To know how to predict and describe what an algorithm or simple program will do. (Thinking like a computer / Control programs)</p> <p>To know how to create an algorithm or simple program and explain its purpose. (Thinking like a computer / Control programs)</p> <p>To know how to spot patterns and how we can repeat commands in a program (repetition). (Thinking like a computer / Control programs)</p> <p>To know that debugging means finding and fixing errors in a program or algorithm. (Thinking like a computer / Control programs)</p> <p>To know how to spot errors in an algorithm or program and fix them (debugging). (Thinking like a computer / Control programs)</p>	<p><b>To know the meaning of the terms:</b> pattern, repeat, rules, instructions, sequence, algorithm, program, command, programming, debugging, tinkering, pseudocode, repetition, decomposition.</p> <p>To know that pseudocode is where an algorithm is planned and written in plain English, rather than a specific computer code or language. (Computational thinking)</p> <p>To know that repetition means repeating certain instructions (creating loops) in a program. (Computational thinking)</p> <p>To know that decomposition means breaking down a problem, activity or system into smaller steps or parts.. (Computational thinking)</p> <p>To know how to create precise, correctly sequenced algorithms and programs. (Computational thinking)</p> <p>To know how to use repetition (creating loops) in a sequence of instructions. (Computational thinking)</p> <p>To know how to identify and use repetition (loops) in an algorithm and program and explain why it is useful. (Computational thinking)</p> <p>To know how identify errors in an algorithm or program and debug the errors by thinking about what should be happening (logical reasoning). (Computational thinking)</p> <p>To know how to use decomposition to break a problem into smaller steps before programming and</p>	<p><b>To know the meaning of the terms:</b> pattern, repeat, rules, instructions, sequence, algorithm, program, command, programming, debugging, tinkering, pseudocode, repetition, decomposition, code, coding, logical reasoning.</p> <p>To know that a code is a language that a computer understands (and there are many different coding languages we can use). (Programming problem-solving)</p> <p>To know that coding is writing an algorithm or program in a specific computer language (a code). (Programming problem-solving)</p> <p>To know that logical reasoning is thinking about what should be happening, to help us predict what comes next, to identify causes and their effects and to detect and fix problems. (Programming problem-solving)</p> <p>To know how to use pseudocode to plan how a program will work and what it should do, before using software to write the program. (Programming problem-solving)</p> <p>To know how to use logical reasoning to explain how algorithms work and predict what they do. (Programming problem-solving)</p> <p>To know how to use logical reasoning to debug an algorithm or program and explain how the problem was solved. (Programming problem-solving)</p>	<p><b>To know the meaning of the terms:</b> pattern, repeat, rules, instructions, sequence, algorithm, program, command, programming, debugging, tinkering, repetition, decomposition, code, coding, abstraction, procedure, selection.</p> <p>To know that abstraction means identifying what is important and leaving out unnecessary detail in an algorithm or program. (Simulations and rovers; Micro:Bit programming)</p> <p>To know that a procedure is a short sequence of commands, nested within a program, that can be run repeatedly, making the program more efficient. (Programming efficiently; Micro:Bit programming)</p> <p>To know that selection is when a program carries out instructions depending on whether a choice is made or a condition is met (If... then...)</p> <p>(Programming efficiently / Simulations and rovers / Micro:Bit programming)</p> <p>To know how to use logical reasoning to explain how algorithms and programs work, predict what they do and the effect of changes. (Simulations and rovers; Programming efficiently; Micro:Bit programming)</p> <p>To know how to use logical reasoning, decomposition and abstraction to plan and write algorithms and programs.</p>	<p><b>To know the meaning of the terms:</b> pattern, repeat, rules, instructions, sequence, algorithm, program, command, programming, debugging, tinkering, repetition, decomposition, code, coding, pseudocode, abstraction, procedure, selection, variable.</p> <p>To know that a variable is a piece of data with a value that can change, which is stored in memory while a program is running, so that it can be retrieved later. (Programming with variables / DCCT Rambots)</p> <p>To be able to use the vocabulary of computer science when explaining a program's purpose/features. (Programming with variables / DCCT Rambots)</p> <p>To know how to use logical reasoning to explain how algorithms and programs work, to make predictions and make deliberate changes to create desired effects. (Programming with variables / DCCT Rambots)</p> <p>To know how to explain instances of problem-solving and the choices made. (Programming with variables / DCCT Rambots)</p> <p>To be able to apply skills such as decomposition, repetition, procedures and abstraction, explaining how they made a program more efficient. (Programming with variables / DCCT Rambots)</p> <p>To know how to use variables and selection in an algorithm or program. (Programming with variables / DCCT Rambots)</p>

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## **Computing: Progression grid & vocabulary**



				<p>To know that tinkering is where you explore, play with, or make changes to a program, to see what happens and find out how it works. (Thinking like a computer / Control programs)</p>	<p>explain why this is useful when programming. (Computational thinking)</p>	<p>To know how to program and sequence an animation in Scratch. (Programming problem-solving)</p>	<p>(Simulations and rovers; Programming efficiently; Micro:Bit programming)</p> <p>To know how to debug an algorithm/program and explain how the problem was solved. (Simulations and rovers; Programming efficiently; Micro:Bit programming)</p> <p>To know how to use abstraction to identify what is important and what can be left out when designing a program. (Simulations and rovers; Programming efficiently; Micro:Bit programming)</p> <p>To know how to use abstraction to identify and simplify the details needed for a simulation. (Simulations and rovers)</p> <p>To know how to use repetition, procedures or abstraction to make programs more efficient. (Simulations and rovers; Programming efficiently; Micro:Bit programming)</p>
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End point(s)	Nursery	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	
<p><b>Computer systems and networks</b></p> <p>2. To know the features of computer systems, including the Internet and World Wide Web, and how they can be used to search for and share data and information privately or publicly.</p> <p>Key vocabulary to be introduced in each year.</p>	<p><b>To know the meaning of the terms:</b> machine, technology.</p> <p>To know that a machine is something with moving parts, made by people.</p> <p>To know that technology includes machines that we use to help us do things.</p> <p>To know that there is technology all around us that we can use to help us with everyday tasks.</p>	<p><b>To know the meaning of the terms:</b> machine, technology, electronic, digital device.</p> <p>To know that electronic means a machine that is powered by electricity and has electrical parts inside.</p> <p>To know that digital devices are electronic machines such as computers, laptops, tablets, games consoles, smartphones.</p> <p>To know that we can use digital devices and technology to talk, share and find things out.</p> <p>To know how to use simple features of technology or digital devices (e.g. pressing buttons, saying commands).</p>	<p><b>To know the meaning of the terms:</b> machine, technology, electronic, digital device, computer, data, keyword, online.</p> <p>To know that technology is a machine or object that has been designed to help us do something more easily. (Technology around us)</p> <p>To know that a computer is a digital device that can be given instructions to carry out tasks, calculate and store information (Technology around us)</p> <p>To know how to locate examples of computers or digital devices at home, in school and in the wider world. (Technology around us)</p> <p>To know how to identify the common parts of a personal computer or digital device and what they are used for (e.g. hard drive, memory stick, monitor, keyboard, mouse/touchpad, printer, scanner, touchscreen.) (Technology around us)</p> <p>To know that we can talk, share and find things out online, using digital devices such as a computer, tablet, phone, games console, voice-control assistant (e.g. Alexa), search engine (e.g. Google). (Technology around us)</p> <p>To know that data is how a computer understands and stores information, facts and numbers in its memory. (Technology around us)</p> <p>To know that being online means connecting to the internet with a digital device, to find out information or to communicate with others.</p>	<p><b>To know the meaning of the terms:</b> machine, technology, electronic, digital device, computer, data, keyword, online, information, World Wide Web (WWW), website, links, searching, search engine.</p> <p>To know that information is the useful knowledge or understanding that we can find out from data. (Using the internet)</p> <p>To know that the World Wide Web is a global collection of information and digital media, shared using websites, that can be accessed online. (Using the internet)</p> <p>To know that to be 'online' means to access the World Wide Web using a digital device that is connected to it. (Using the internet)</p> <p>To know that when we are online, we are connecting our device to other devices all over the world. (Using the internet)</p> <p>To know that a website is used to share information online. (Using the internet)</p> <p>To know that searching is to look for specific information stored online using key words. (Using the internet)</p> <p>To know that a search engine is a program that searches the WWW for key words, to quickly find the most useful websites. (Using the internet)</p> <p>To know that there are different search engines and that some are more "child-friendly" (e.g. swiggle.org.uk) (Using the internet)</p>	<p><b>To know the meaning of the terms:</b> machine, technology, electronic, digital device, computer, online, data, keyword, information, World Wide Web (WWW), website, links, searching, search engine, hardware, software, input, processor, output, network.</p> <p>To know that hardware is any physical part of a computer, device or technology. (Computer networks)</p> <p>To know that software is any digital program that is needed to let us control hardware. (Computer networks)</p> <p>To know that a computer comprises components or devices for input, processing and output. (Computer networks)</p> <p>To know that computers accept inputs and produce outputs. (Computer networks)</p> <p>To know that an input is data, actions or commands that are put into a system. (Computer networks)</p> <p>To know that a processor is the part of a computer that decides what to do when an input is received, in order to produce an appropriate output. (Computer networks)</p> <p>To know that an output is data, actions, feedback or physical results that a computer system produces. (Computer networks)</p> <p>To know that a network is a number of devices, connected physically (by wires) or wirelessly (Wi-Fi). (Computer networks)</p>	<p><b>To know the meaning of the terms:</b> machine, technology, electronic, digital device, computer, online, data, keyword, information, World Wide Web (WWW), website, links, searching, search engine, hardware, software, input, processor, output, network, web address, address bar, internet, upload, download, server, content, web address, address bar.</p> <p>To know that hardware is any physical part of a computer, device or technology. (Computer networks)</p> <p>To know that software is any digital program that is needed to let us control hardware. (Computer networks)</p> <p>To know that a computer comprises components or devices for input, processing and output. (Computer networks)</p> <p>To know that computers accept inputs and produce outputs. (Computer networks)</p> <p>To know that an input is data, actions or commands that are put into a system. (Computer networks)</p> <p>To know that a processor is the part of a computer that decides what to do when an input is received, in order to produce an appropriate output. (Computer networks)</p> <p>To know that an output is data, actions, feedback or physical results that a computer system produces. (Computer networks)</p> <p>To know that a network is a number of devices, connected physically (by wires) or wirelessly (Wi-Fi). (Computer networks)</p>	<p><b>To know the meaning of the terms:</b> machine, technology, electronic, digital device, computer, online, data, keyword, information, World Wide Web (WWW), website, links, searching, search engine, hardware, software, input, processor, output, network, web address, address bar, internet, upload, download, server, content, system, IP address, router, data packet, bots, web crawler, index, results, ranking, protocol, refine, domain name server.</p> <p>To know that the internet is a global network of networks (linked devices) which we use to host and access the WWW. (Understanding the internet)</p> <p>To explain how the internet allows us to view and access the World Wide Web (WWW). (Understanding the internet)</p> <p>To know how to explain the difference between the internet and the World Wide Web (WWW). (Understanding the internet)</p> <p>To know that a website is used to share information online and is usually formed of several webpages showing text and digital media. (Understanding the internet)</p> <p>To know that a server is a computer on a network that is a hub for other devices to connect to; websites, data, programs and services are stored on a server. (Understanding the internet)</p> <p>To know that every website has a web address which is a unique location on the WWW. (Understanding the internet)</p> <p>To know that the address bar on a browser allows you to go directly to a website, without</p>	<p><b>To know the meaning of the terms:</b> machine, technology, electronic, digital device, computer, online, data, keyword, information, World Wide Web (WWW), website, links, searching, search engine, hardware, software, input, processor, output, network, web address, address bar, internet, upload, download, server, content, system, IP address, router, data packet, bots, web crawler, index, results, ranking, protocol, refine, domain name server, HTML, hyperlink, copyright-free, fair use.</p> <p>To know that a system has parts (physical, digital, human, processes) that work together to make something happen. (Systems, searches and sending data)</p> <p>To know how computer systems are used to automate everyday tasks and situations, and to evaluate their advantages and disadvantages. (Systems, searches and sending data)</p> <p>To know how devices on networks and the internet communicate with each other, using protocols, routers and data packets to direct data quickly and efficiently along many paths of the network. (Systems, searches and sending data)</p> <p>To know that an IP address is a unique location identifier for a device on a network. (Systems, searches and sending data)</p> <p>To know that a router is a device that helps to forward and direct data across networks. (Systems, searches and sending data)</p>	<p><b>To know the meaning of the terms:</b> machine, technology, electronic, digital device, computer, online, data, keyword, information, World Wide Web (WWW), website, links, searching, search engine, hardware, software, input, processor, output, network, web address, address bar, internet, upload, download, server, content, system, IP address, router, data packet, bots, web crawler, index, results, ranking, protocol, refine, domain name server, HTML, hyperlink, copyright-free, fair use.</p> <p>To know the common features of a web page and the types of media content they can use. (Web design)</p> <p>To know how to plan, design, create and evaluate a website, including pages, hyperlinks and media content. (Web design / Staying safe online)</p> <p>To know that a hyperlink is a link between webpages or files in different locations, usually activated by clicking. (Web design)</p> <p>To know that 'copyright-free' means that the content can be reused without permission from/payment to the creator. (Web design / Staying safe online)</p> <p>To know that 'fair use' means that small parts of content can be reused for certain purposes only (such as news reporting, teaching or research) without permission from/payment to the creator. (Web design / Staying safe online)</p>

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## **Computing: Progression grid & vocabulary**



			<p>(Technology around us / Staying safe online: Managing online information)</p> <p>To know that a keyword is an important word that we can use to search online for information. (Staying safe online: Managing online information)</p>	<p>To know how to choose useful or relevant words for a search. (Using the internet)</p> <p>To know that links are website objects that can be clicked to take you to another website. (Using the internet)</p> <p>To know that there are many devices in the home could be connected to the internet. (Staying safe online)</p>	<p>To know how data can be shared between devices on a network and explain why this is useful. (Computer networks)</p> <p>To know how data and information (e.g. emails) are shared across the internet and explain why the network needs protection. (Computer networks)</p>	<p>searching, by typing in the web address. (Understanding the internet / IT-based tasks)</p> <p>To know that upload/download means to transfer data or files to/from a device and a shared space online (such as a server for a website). (Understanding the internet)</p> <p>To know that content is any data, digital media, programs or services that users create and share online. (Understanding the internet)</p> <p>To know that online content is created by people and that there are rules to protect content creators. (Understanding the internet / Staying safe online)</p> <p>To know and explain why we need to think carefully before sharing content online. (Understanding the internet / Staying safe online)</p> <p>To know that not everything shared online is true, honest, accurate or legal. (Understanding the internet / Staying safe online)</p>	<p>To know that a packet is where data is split into smaller parts, that are sent separately across a network and reassembled at the other end, which improves efficiency. (Systems, searches and sending data)</p> <p>To know that a protocol is an agreed way of doing things for communication between devices. (Systems, searches and sending data)</p> <p>To know that a domain name server is a device that acts as an 'address book' so devices on a network can locate each other. (Systems, searches and sending data)</p> <p>To know that to refine means to give more specific search terms, in order to narrow down the results. (Systems, searches and sending data)</p> <p>To know how to refine a search and compare different search engines' results. (Systems, searches and sending data)</p> <p>To know that bots are programs that carry out automated tasks online. (Systems, searches and sending data)</p> <p>To know that web crawlers are bots that create an index of websites based on key words in the website contents. (Systems, searches and sending data)</p> <p>To know that an index is a list of websites that contain a specific search term, generated by web crawlers to enable searches. (Systems, searches and sending data)</p> <p>To know that results are a list of websites produced by a</p>	<p>To know how to find copyright-free content, explain 'fair use' and how, when and why we need to credit the original creators. (Web design / Staying safe online)</p> <p>To know that HyperText Markup Language (HTML) is the programming language for creating webpages so that they can be displayed in a web browser. (Web design)</p> <p>To know how to use basic HTML tags to create simple web pages. (Web design)</p> <p>To know how to create and upload content to the WWW via a website. (Web design)</p>
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							<p>search, and that ranking lists them in order of popularity or relevance (and creators may pay to improve ranking). (Systems, searches and sending data)</p> <p>To know how search results are ranked and ordered using rules, and that this ranking can be influenced. (Systems, searches and sending data)</p> <p>To know how to compare working online and offline and explain how the internet enables effective collaboration. (Systems, searches and sending data)</p>	
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<p><b>Control of physical systems</b></p> <p>3. To know how to use simulations and control physical systems to test real-world situations and achieve tasks.</p> <p>Key vocabulary to be introduced in each year.</p>	<p>To know how to make simple digital devices or toy do things using a touch-screen, buttons or other access device.</p>	<p>To know the meaning of the term: <b>control</b>.</p> <p>To know that control means to make a toy or device do what you want it to do.</p> <p>To know how to purposefully control a digital device or toy using a mouse, touch-screen, buttons or other access device.</p>	<p>To know the meaning of the terms: control, <b>predict</b>, <b>robot</b>, <b>command</b>.</p> <p>To know that a robot is an electronic machine that can be given instructions to carry out a task on its own. <i>(Patterns and algorithms / Controlling robots)</i></p> <p>To know that a command is an action or order carried out as a step within a program. <i>(Patterns and algorithms / Controlling robots)</i></p> <p>To know that to predict is to guess what should happen next, based on what we know. <i>(Patterns and algorithms / Controlling robots)</i></p> <p>To know how to purposefully control a floor robot to move to a specific point. <i>(Controlling robots)</i></p> <p>To know how to predict what a program should do, compare it with what actually happens, and begin to spot errors. <i>(Patterns and algorithms / Controlling robots)</i></p>	<p>To know the meaning of the terms: control, predict, robot, command, <b>physical</b>, <b>digital</b>.</p> <p>To know that physical refers to something that exists in real-life and can be sensed or touched (such as a robot or a device). <i>(Using the internet / Control programs)</i></p> <p>To know that digital refers to something created on a computer that we can interact with, but which does not exist as a physical object (such as an app, program or file). <i>(Using the internet/ PowerPoint presentations / Control programs)</i></p> <p>To know that a robot cannot think for itself and must be programmed in order to carry out tasks on its own. <i>(Control programs)</i></p> <p>To know how to control a robot using a program and making predictions about the outcome, and fixing errors in the command sequence. <i>(Control programs)</i></p>	<p>To know the meaning of the terms: control, predict, robot, physical, digital, command, <b>pseudocode</b>, <b>input</b>, <b>processor</b>, <b>output</b>.</p> <p>To know that pseudocode is where an algorithm is planned and written in plain English, rather than a specific computer language. <i>(Computational thinking)</i></p> <p>To know that an input is data, actions or commands that are put into a system. <i>(Computer networks)</i></p> <p>To know that a processor is the part of a computer that decides what to do when an input is received, in order to produce an appropriate output. <i>(Computer networks)</i></p> <p>To know that an output is data, actions, feedback or physical results that a computer system produces. <i>(Computer networks)</i></p> <p>To know how to precisely program a robot or screen turtle more efficiently using repetition, making predictions about the outcome, and fixing errors in the command sequence. <i>(Computational thinking)</i></p>	<p>To know the meaning of the terms: control, predict, robot, physical, digital, command, pseudocode, <b>sensor</b>, <b>data logger</b>.</p> <p>To know that a sensor is a device that can receive input data, such as light, sound or temperature. <i>(Datalogging)</i></p> <p>To know that a data logger is a digital device that can collect data over time and store it. <i>(Datalogging)</i></p> <p>To know how to use a data-logger to collect data over time. <i>(Datalogging)</i></p>	<p>To know the meaning of the terms: control, predict, robot, physical, digital, command, pseudocode, selection, sensor, data-logger, <b>Micro:Bit</b>, <b>event</b>, <b>selection</b>, <b>remote-control</b>, <b>simulation</b>.</p> <p>To know that remote-control is where a machine or device is operated from a distance, but cannot act on its own, unlike a robot, which can respond to inputs from sensors to change its outputs independently. <i>(Simulations and rovers / Micro:Bit programming)</i></p> <p>To know that a simulation is a model of a physical system, process or situation, which can be used to safely test how something works or to explore what could happen in real life. <i>(Simulations and rovers)</i></p> <p>To know how to design and program a simulation using Scratch. <i>(Simulations and rovers)</i></p> <p>To know how to use a simulation to design, build and test a physical system, e.g. Mars rover. <i>(Simulations and rovers)</i></p> <p>To know how to evaluate the usefulness and limitations of a simulation. <i>(Simulations and rovers)</i></p> <p>To know how to program a robot (or a simulated one) that uses the input from sensors to change its outputs, (e.g. avoid obstacles). <i>(Simulations and rovers)</i></p> <p>To know that a Micro:Bit is a microcomputer built into a physical card, that can be programmed using inputs and</p>	<p>To know the meaning of the terms: control, predict, robot, physical, digital, command, remote-control, Micro:Bit, pseudocode, event, selection, sensor, data-logger, simulation, <b>Bluetooth</b>.</p> <p>To know how to program a Micro:Bit to use a range of its features, including inputs and outputs, to solve a problem or suit a particular purpose. <i>(Programming with variables)</i></p> <p>To know that Bluetooth is a short-range, wireless technology that uses radio waves to send data and control signals between paired devices. <i>(Programming with variables / DCCT Rambots)</i></p> <p>To know how to program a Micro:Bit to communicate with other Micro:Bits or devices using a Bluetooth connection. <i>(Programming with variables)</i></p>

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							<p>outputs, or to control other devices. (Micro:Bit programming)</p> <p>To know how to use the main features and functions of a Micro:Bit. (Micro:Bit programming)</p> <p>To know that an event is an action or output that is triggered by an input. (Programming efficiently / Simulations and rovers / Micro:Bit programming)</p> <p>To know that selection is when a program carries out instructions depending on whether a choice is made or a condition is met (If... then...) (Programming efficiently / Simulations and rovers / Micro:Bit programming)</p> <p>To know how to use selection to trigger events or create timed sequences of events on a Micro:Bit. (Micro:Bit programming)</p>	
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End point(s)	Nursery	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<p><b>Information technology (1)</b></p> <p>4. Know how to manipulate files, folders and windows, and type quickly and accurately, using a range of effective formats, apps and devices.</p> <p><b>Key vocabulary to be introduced in each year.</b></p>	<p>To know how to use buttons or a touchscreen on a digital device to make marks, text or pictures appear on a screen.</p>	<p><b>To know the meaning of the terms:</b> type, keyboard, mouse/touchpad, touchscreen.</p> <p>To know that to type means to write by pressing keys on a computer keyboard.</p> <p>To know that a keyboard is a device with keys (buttons) for typing letters and numbers.</p> <p>To know how to type letters and numbers on a tablet or computer keyboard.</p> <p>To know that a touchscreen is used to control or type on a screen of a digital device.</p>	<p><b>To know the meaning of the terms:</b> type, keyboard, touchscreen, mouse/touchpad, log on/off, app, save, file, text, image, menu, format, digital media, folder, cursor, icon, print, printer, windows, browser.</p> <p>To know how to switch on/off and to log on/off a device or software. <i>(Technology around us / Digital writing / IT-based tasks)</i></p> <p>To know that 'log on' means to type in a special name and/or password, so that a device or software can check who is using it. <i>(Technology around us / Digital writing / IT-based tasks)</i></p> <p>To know that an app (application) is a computer program that you use for a particular task. <i>(Technology around us / Digital writing / IT-based tasks)</i></p> <p>To know that a mouse / touchpad is a device for moving a pointer around and choosing things on a computer screen. <i>(Technology around us / Digital writing / IT-based tasks)</i></p> <p>To know how to use a mouse / touchpad / touchscreen on computer or device, to launch and control apps. <i>(Technology around us / Digital writing / IT-based tasks)</i></p> <p>To know that a file is a copy of work done on a computer, that is stored in its memory and can be reopened later. <i>(Technology around us / Digital writing / IT-based tasks)</i></p>	<p><b>To know the meaning of the terms:</b> type, keyboard, touchscreen, mouse/touchpad, log on/off, app, save, file, text, image, menu, format, digital media, folder, cursor, icon, print, printer, windows, browser.</p> <p>To know that digital media is audio, video, images, text or data documents that are created and stored as files. <i>(Using the internet / PowerPoint Presentations / Seesaw)</i></p> <p>To know that a folder is a storage space used to group and organise files saved on a computer. <i>(PowerPoint Presentations / IT-based tasks)</i></p> <p>To know that the cursor is the pointer that shows the current position of the mouse/pad. <i>(PowerPoint Presentations / IT-based tasks)</i></p> <p>To know that icons are small pictures that represent a file, folder or app. <i>(PowerPoint Presentations / IT-based tasks)</i></p> <p>To know that print means to send a computer file to a printer, which makes a copy using ink on paper. <i>(PowerPoint Presentations / Art – Portraits and poses / IT-based tasks)</i></p> <p>To know that a printer is a device that makes copies of computer files on paper. <i>(PowerPoint Presentations / Art – Portraits and poses / IT-based tasks)</i></p> <p>To know that windows are boxes that represent folders</p>	<p><b>To know the meaning of the terms:</b> type, keyboard, touchscreen, mouse/touchpad, log on/off, app, save, file, text, image, menu, format, digital media, folder, cursor, icon, print, printer, windows, browser, web address, address bar, word processing, screenshot, copy/paste.</p> <p>To know how to find, order, open, create, rename and save files and folders. <i>(Word processing / IT-based tasks)</i></p> <p>To know that every website has a web address which is a unique location on the WWW. <i>(Computer networks)</i></p> <p>To know that the address bar on a browser allows you to go directly to a website, without searching, by typing in the web address. <i>(Computer networks / IT-based tasks)</i></p> <p>To know when to use the address bar or a search engine in a browser to navigate the WWW efficiently. <i>(Computer networks / IT-based tasks)</i></p> <p>To know that word processing is using typing software (such as Microsoft Word) for writing. <i>(Word processing / IT-based tasks)</i></p> <p>To know how to type sentences quickly and accurately. <i>(Word processing / IT-based tasks)</i></p> <p>To know that a screenshot is a saved image of all or part of what is currently on screen, captured using an app.</p>	<p><b>To know the meaning of the terms:</b> type, keyboard, touchscreen, mouse/touchpad, log on/off, app, save, file, text, image, menu, format, digital media, folder, cursor, icon, print, printer, windows, browser, web address, address bar, word processing, screenshot, copy/paste, taskbar, spellchecker.</p> <p>To know how to manipulate windows side by side, and to switch between windows and tabs using the taskbar. <i>(IT-based tasks)</i></p> <p>To know that the taskbar shows which apps or windows are currently open. <i>(IT-based tasks)</i></p> <p>To know that a spellchecker is a program that detects spelling errors and offers suggestions. <i>(IT-based tasks)</i></p> <p>To know how to cut / copy / paste or drag/drop files and folders between windows. <i>(IT-based tasks)</i></p> <p>To know how to type paragraphs quickly and accurately, using a spellchecker to proofread. <i>(IT-based tasks)</i></p> <p>To know how to choose style, layout and formatting effects, combining text and images, to suit a purpose. <i>(IT-based tasks)</i></p>	<p><b>To know the meaning of the terms:</b> type, keyboard, touchscreen, mouse/touchpad, log on/off, app, save, file, text, image, menu, format, digital media, folder, cursor, icon, print, printer, windows, browser, web address, address bar, word processing, screenshot, copy/paste, taskbar, spellchecker, shortcut.</p> <p>Know how to organise files and folders to enable efficient retrieval. <i>(IT-based tasks)</i></p> <p>Know how to choose the apps or document types to best suit a task. <i>(IT-based tasks)</i></p> <p>To know that a shortcut is a combination of key presses, used to do something more quickly than by using menus. <i>(IT-based tasks)</i></p> <p>Know how to use keyboard shortcuts to edit text. <i>(IT-based tasks)</i></p> <p>Know how to combine text, images, layout and formatting make different types of documents. <i>(IT-based tasks)</i></p> <p>Know how to access and use shortcuts, buttons and menus confidently and efficiently. <i>(IT-based tasks)</i></p>	<p><b>To know the meaning of the terms:</b> type, keyboard, touchscreen, mouse/touchpad, log on/off, app, save, file, text, image, menu, format, digital media, folder, cursor, icon, print, printer, windows, browser, taskbar, web address, address bar, word processing, screenshot, copy/paste, taskbar, spellchecker, shortcut, bookmark.</p> <p>To know that a bookmark is a saved web address. <i>(Web design / IT-based tasks)</i></p> <p>To know how to use bookmarks so you can return to a website easily. <i>(Web design / IT-based tasks)</i></p> <p>Know how to type quickly, confidently and accurately using both hands, in a range of apps and documents. <i>(Web design / IT-based tasks)</i></p> <p>Know how to combine text, images, layout and formatting, using shortcuts, buttons and menus confidently and efficiently, to make a range of documents for a purpose. <i>(Web design / D&amp;T – Make Do and Mend / Art – Environmental artists / IT-based tasks)</i></p> <p>To know how to copy and paste a website link into another document. <i>(Web design / IT-based tasks)</i></p>

# BISHOP LONSDALE CHURCH OF ENGLAND PRIMARY SCHOOL AND NURSERY

*BECOMING INDEPENDENT SUCCESSFUL HONEST OPEN-MINDED PEOPLE*

## **Computing: Progression grid & vocabulary**



			<p>that are open or apps that are running. (PowerPoint Presentations / IT-based tasks)</p> <p>To know how to use the cursor, icons and windows to find/open/close files or folders. (PowerPoint Presentations / IT-based tasks)</p> <p>To know how to save work using an appropriate filename and explain why this is useful. (PowerPoint Presentations / IT-based tasks)</p> <p>To know that a browser is an app for accessing the WWW and viewing websites. (Using the internet / IT-based tasks)</p> <p>To know how to navigate the WWW using a browser, including typing in a search, clicking links and using the home, back and forward buttons. (Using the internet / IT-based tasks)</p> <p>To know that there are different search engines and that some are more "child-friendly" (e.g. swiggle.org.uk). (Using the internet)</p> <p>To know how to choose useful or relevant words for a search. (Using the internet)</p> <p>To know how to use a blog (e.g. Seesaw) safely and responsibly to share work and comments. (Using the internet / Seesaw)</p> <p>To know how to type complete sentences, with punctuation. (PowerPoint Presentations / IT-based tasks)</p> <p>To know how to add images to a document.</p>	<p>(Word processing / IT-based tasks)</p> <p>To know how to capture screenshots. (Word processing / IT-based tasks)</p> <p>To know how to combine text and images in a document and adjust the layout. (Word processing / IT-based tasks)</p> <p>To know how to select effective text formats to suit the document's purpose. (Word processing / IT-based tasks)</p> <p>To know how to copy/paste images into a document or presentation. (Art – People and places / IT-based tasks)</p>		
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# BISHOP LONSDALE CHURCH OF ENGLAND PRIMARY SCHOOL AND NURSERY

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## **Computing: Progression grid & vocabulary**



				<p>(PowerPoint Presentations / IT-based tasks)</p> <p>To know that format means how text looks or what type of file it is.</p> <p>(PowerPoint Presentations / IT-based tasks)</p> <p>To know how to change a text format to improve the appearance of a document.</p> <p>(PowerPoint Presentations / IT-based tasks)</p>				
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# BISHOP LONSDALE CHURCH OF ENGLAND PRIMARY SCHOOL AND NURSERY

BECOMING INDEPENDENT SUCCESSFUL HONEST OPEN-MINDED PEOPLE

## Computing: Progression grid & vocabulary



End point(s)	Nursery	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<p><b>Information technology (2)</b></p> <p>5. Know how to record and present data in a range of ways and create a variety of digital art, presentations and media content to share information.</p> <p><b>Key vocabulary to be introduced in each year.</b></p>	<p>To know how to make a simple digital picture using an app, with help.</p>	<p><b>To know the meaning of the terms: chart.</b></p> <p>To know that a chart is a visual way of recording how many or much of something there is.</p> <p>To know how to take a picture and record a short video using a digital device.</p> <p>To know how to collect simple data in a chart.</p>	<p><b>To know the meaning of the terms: chart, digital photos.</b></p> <p>To know how to take pictures or record a video of your work. (Art – Street View)</p> <p>To know that it is important to think carefully before sharing a photo or video online. (Staying safe online)</p> <p>To know that text, audio, video or images can be created or viewed using a computer. (Technology around us / Art – Street View)</p> <p>To know that digital photos are any images created, viewed and shared using digital devices. (Technology around us / Art – Street View)</p> <p>To know how to take digital photos for art and download or view them on a computer. (Art – Street View)</p> <p>To know how to collect, record and present data in a simple chart or graph. (Maths / Science)</p>	<p><b>To know the meaning of the terms: chart, digital photos, digital media, digital art, blog, post, PowerPoint, presentation, edit.</b></p> <p>To know that digital media is audio, video, images, text or data documents that are created and stored as files. (PowerPoint Presentations / Seesaw)</p> <p>To know that PowerPoint is an app for creating presentations with text, images and other digital media. (PowerPoint Presentations)</p> <p>To know that a presentation is a set of slides with text and images, used to explain about a topic. (PowerPoint Presentations)</p> <p>To know how to create a simple PowerPoint presentation including text and images. (PowerPoint Presentations)</p> <p>To know how to take safe pictures of work to be shared on a blog. (Using the internet / Seesaw)</p> <p>To know that we must only upload photos that are safe to share and for which we have permission, explaining why. (Using the internet / Seesaw)</p> <p>To know how to collect, sort and present data or information in a range of charts or graphs. (Maths / Science)</p> <p>To know that digital art is artwork created using an app. (Art – Portraits and poses)</p>	<p><b>To know the meaning of the terms: chart, digital photos, digital media, digital art, blog, post, PowerPoint, presentation, edit, comments, animation.</b></p> <p>To know how to present information using a PowerPoint presentation including text and images. (IT-based tasks / Art – People and places)</p> <p>To know that comments are where someone adds a reply to a person's earlier post on a blog, social media or messaging group. (Staying safe online / Seesaw)</p> <p>To know how to create blog posts including different media, add appropriate comments and know how to report inappropriate content. (Staying safe online / Seesaw)</p> <p>To know how to collect, sort and present data or information in charts/graphs, using an app. (Maths / Science)</p> <p>To know that animation is to create visual movement from still images, practical models or computer models (created either practically or using computer software). (Stop-frame animation)</p> <p>To know how to create stop-frame animation using an app. (Stop-frame animation)</p> <p>To know how to take effective digital photos, considering lighting and positioning. (Art – Ammonite)</p> <p>To know how to make changes to an improve a digital photo using an editing app.</p>	<p><b>To know the meaning of the terms: chart, digital photos, digital media, digital art, blog, post, PowerPoint, presentation, edit, comments, animation, datalogger, retouching.</b></p> <p>To know how to present information using a PowerPoint presentation including text and images. (IT-based tasks / Art – People and places)</p> <p>To know that comments are where someone adds a reply to a person's earlier post on a blog, social media or messaging group. (Staying safe online / Seesaw)</p> <p>To know how to create blog posts including different media and comments, explaining how to report inappropriate content. (Staying safe online / IT-based tasks / Seesaw)</p> <p>To know how to collect, sort and present data or information in a range of charts/graphs, using an app. (Maths / Science)</p> <p>To know how to use tools and effects to change a digital image, describing the positive and negative effects of retouching. (Photo editing / Art – Vista)</p> <p>To know how to take effective digital photos, considering lighting and positioning, and manipulate them using an app. (Photo editing / Art – Vista)</p> <p>To know how to use an app to create digital art using effects. (Photo editing / Art – Vista)</p> <p>To know that retouching means to make small changes that are intended to improve an image but also be hard to detect afterwards. (Photo editing / Art – Vista)</p> <p>To know how to recognise images as 'fake' or 'real'.</p>	<p><b>To know the meaning of the terms: chart, digital photos, digital media, digital art, blog, post, PowerPoint, presentation, edit, comments, animation, retouching, datalogger, CAD.</b></p> <p>To know how to combine text, images and animations in a presentation to communicate information clearly. (IT-based tasks)</p> <p>To know how to create blog posts including different media and comments, explaining how to report inappropriate content. (Staying safe online / IT-based tasks / Seesaw)</p> <p>To know how to collect, sort and present data or information, choosing appropriate charts/graphs, using an app. (Maths / Science)</p> <p>To know how to create a playable game using Scratch. (Programming efficiently)</p> <p>To know that CAD (computer-aided design) is using software/apps to design and build 3D models and structures. (D&amp;T – Architecture)</p> <p>To know how to create simple 3D models using CAD or an app, e.g. Google SketchUp. (D&amp;T – Architecture)</p> <p>To know how to take effective digital photos, considering lighting and positioning, and manipulate them to create effects. (Art – Line, light and shadow)</p> <p>To know how to use an app to create digital art using digital photos, editing and effects.</p>	<p><b>To know the meaning of the terms: chart, digital photos, digital media, digital art, blog, post, PowerPoint, presentation, edit, comments, animation, retouching, datalogger, CAD, embedded content, database, flat-file database, records, field, value, attributes.</b></p> <p>To know how to select and combine digital media in a presentation, to communicate information to a specific audience. (IT-based tasks)</p> <p>To know how to create and evaluate varied blog content and comments, explaining how to report inappropriate content. (Staying safe online / IT-based tasks / Seesaw)</p> <p>Know how to use a range of ways to collect, sort and present data or information, choosing appropriate charts/graphs, using an app. (Maths / Science)</p> <p>To know how to create a website with hyperlinks, text, images and embedded media. (Web design)</p> <p>To know that embedded content means media that is visible within a webpage, not accessed through a link. (Web design)</p> <p>To know how to create and evaluate websites and blog content and comments, explaining how to report inappropriate content. (Web design / Staying safe online)</p> <p>To know how to use a range of ways to collect, sort and present data or information, selecting the best chart/graphs for the purpose, using an app. (Maths / Science)</p> <p>To know that a database is a collection of organised data that is stored on a computer, which allows people to search and sort large quantities of data to find information. (Databases)</p>

# BISHOP LONSDALE CHURCH OF ENGLAND PRIMARY SCHOOL AND NURSERY

BECOMING **I**NDPENDENT **S**UCCESSFUL **H**ONEST **O**PEN-MINDED **P**EOPLE

## Computing: Progression grid & vocabulary



				<p>To know that to edit means to make changes to the original media. (Art – Portraits and poses)</p> <p>To know how to take selected digital photos and make simple changes using an editing app. (Art – Portraits and poses / Using the internet / Seesaw)</p> <p>To know how to create simple digital art using an app. (Art – Portraits and poses)</p>	(Art – Ammonite)	<p>(Photo editing / Staying safe online)</p> <p>To know how to program an animation using Scratch. (Programming problem-solving)</p> <p>To know that a data logger is a digital device that can collect data over time and store it. (Data-logging)</p> <p>To know how to collect, retrieve and interpret data over time using a data logger. (Data-logging)</p>	(Art – Line, light and shadow)	<p>To know that a flat-file database a collection of data organised in a single table using fields and records. (Databases)</p> <p>To know that a record is a set of data about a particular object, formed from one or more fields of data. To know that a field is one specific piece of data in a database record. (Databases)</p> <p>To know that a value is the 'answer' to each field within a particular record (e.g. a number, yes/no, a name). (Databases)</p> <p>To know that all objects have attributes; in a database, attributes are recorded as a field with a value (e.g. a 'colour', which might be 'red'). (Databases)</p> <p>To know how to use a database to collect and retrieve data, create graphs/charts and use these find out information. (Databases)</p> <p>To know how to collate or take effective digital photos, editing, manipulating or combining them with effects and other media, to create digital art, as a collage, video montage or presentation. (Art – Inuit / Art – Environmental artists)</p>
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# BISHOP LONSDALE CHURCH OF ENGLAND PRIMARY SCHOOL AND NURSERY

*BECOMING INDEPENDENT SUCCESSFUL HONEST OPEN-MINDED PEOPLE*

## Computing: Progression grid & vocabulary



End point(s)	Nursery	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<p><b>Digital literacy and e-safety</b></p> <p>6. Know how to build a positive online identity: communicate respectfully, share content safely and lawfully and self-regulate behaviour.</p> <p>7. Know how to protect yourself online: maintain personal privacy, report abuse, recognise risks and evaluate the quality, accuracy and trustworthiness of online sources of information.</p> <p>All objectives here are part of the <b>Staying safe online</b> strand which is based on Project Evolve.</p> <p>Key vocabulary to be introduced in each year.</p>	<p><b>To know the meaning of the terms:</b> kind/unkind, trusted adult.</p> <p>To know that people can be kind or unkind, face-to-face and online. <i>(Online bullying)</i></p> <p>To know that a trusted adult is someone we know who we can go to for help when we are worried. <i>(Privacy &amp; security)</i></p> <p>To know who our trusted adults are. <i>(Privacy &amp; security)</i></p>	<p><b>To know the meaning of the terms:</b> kind/unkind, trusted adult, personal, private, communicate, information, online, sharing online, personal information, permission, considerate, password, online.</p> <p>To know how being unkind online can make someone feel. <i>(Online bullying)</i></p> <p>To know that we should tell a trusted adult if we are worried about anything. <i>(Online bullying / Privacy &amp; security / Self-image &amp; identity)</i></p> <p>To know that to communicate means how we can talk to other people. <i>(Online relationships)</i></p> <p>To know that we can use devices communicate online. <i>(Online relationships)</i></p> <p>To know that information is what we know someone or something. <i>(Online reputation)</i></p> <p>To know that online means something that can be seen on a computer/device by anyone in the</p>	<p><b>To know the meaning of the terms:</b> kind/unkind, trusted adult, personal, private, communicate, information, online, sharing online, personal information, permission, considerate, password, online identity, avatar, online bullying.</p> <p>To know some simple rules to keep us safe when we are using technology both in and beyond the home. <i>(Health, well-being &amp; lifestyle)</i></p> <p>To know how to behave online in ways that do not upset others. <i>(Online bullying)</i></p> <p>To know that considerate means being kind and thinking about how others would feel if we did something. <i>(Online relationships / Self-image &amp; identity)</i></p> <p>To know that it is important to be considerate, kind and respectful to others when communicating online. <i>(Online relationships)</i></p> <p>To know that different people may have different feelings to me about different things online. <i>(Online relationships)</i></p> <p>To know that permission means you have asked someone if you can do something involving them or use something of theirs. <i>(Online relationships)</i></p> <p>To know that we should ask a trusted adult if we are not sure whether we should share something online. <i>(Online relationships / Self-image &amp; identity)</i></p> <p>To know that sharing online means that anything we say, share or do online may be seen with people all over the world.</p>	<p><b>To know the meaning of the terms:</b> kind/unkind, trusted adult, personal, private, communicate, information, online, sharing online, personal information, permission, considerate, password, online identity, avatar, online bullying.</p> <p>To know that online bullying is where someone is bullied through comments made online or through messages sent to them on a device (e.g. mobile phone). <i>(Online bullying)</i></p> <p>To know how online bullying can happen and explain how and where to get help. <i>(Online bullying)</i></p> <p>To know how to respond when private information is shared online mistakenly or without permission. <i>(Online relationships)</i></p> <p>To know that content on the internet may belong to other people. <i>(Online relationships / Copyright &amp; ownership)</i></p> <p>To know that we should not share other people's information or content online without their permission. <i>(Online relationships)</i></p> <p>To know how to keep our personal information private and to explain why this is important. <i>(Online relationships / Privacy &amp; security)</i></p> <p>To know that we should always ask a trusted adult before clicking 'yes', 'agree' or 'accept' online. <i>(Online relationships)</i></p> <p>To know that we have a right to say 'no' or 'I will have to ask</p>	<p><b>To know the meaning of the terms:</b> kind/unkind, trusted adult, private, communicate, information, online, sharing online, personal information, permission, considerate, password, online identity, avatar, online bullying, username, account, profile, legal / illegal, facts, beliefs, opinions, age-restriction, copyright, digital age of consent, fake, hoax, advertising, spam, misinformation, social media, online reputation.</p> <p>To know how to describe examples of how bullying behaviour could appear online. <i>(Online bullying)</i></p> <p>To know what important rules there are about online behaviour and how not to commit online bullying. <i>(Online bullying / Online relationships)</i></p> <p>To know how and when to get help from a trusted adult, when given examples of problems about being online. <i>(Online bullying / Online relationships / Online reputation)</i></p> <p>To know that there are different ways we know people and describe the differences between knowing someone offline and online. <i>(Online relationships)</i></p> <p>To know how to explain the difference between trusting and liking someone online. <i>(Online relationships)</i></p> <p>To know how to describe how it feels to experience hurtful things online. <i>(Online relationships)</i></p> <p>To know and describe some of the common risks of online activities and suggest ways to stay safe. <i>(Online relationships)</i></p>	<p><b>To know the meaning of the terms:</b> kind/unkind, trusted adult, private, communicate, information, online, sharing online, personal information, permission, considerate, password, online identity, avatar, online bullying, username, account, profile, legal / illegal, facts, beliefs, opinions, age-restriction, copyright, digital age of consent, fake, hoax, advertising, spam, misinformation, social media, online reputation.</p> <p>To know that a range of social media and online technologies can encourage or enable online bullying, and what this might look like. <i>(Online bullying)</i></p> <p>To know that social media are websites and apps that enable their users to communicate, create and share content through posts and messaging. <i>(Online bullying / Privacy &amp; security)</i></p> <p>To know that your online reputation is how people may see what you say or do on line and form opinions about you, even if they do not know you. <i>(Online bullying / Online reputation, Privacy &amp; security)</i></p> <p>To know how to choose carefully before posting or sharing content about others that can affect both your and their feelings or reputations. <i>(Online bullying)</i></p> <p>To know how to identify signs and symptoms of someone else being bullied online. <i>(Online bullying)</i></p> <p>To know how to react to problems, both on and offline, giving examples of people or</p>	<p><b>To know the meaning of the terms:</b> kind/unkind, trusted adult, private, communicate, information, online, sharing online, personal information, permission, considerate, password, online identity, avatar, online bullying, username, account, profile, legal / illegal, facts, beliefs, opinions, age-restriction, copyright, digital age of consent, fake, hoax, advertising, spam, misinformation, social media, online reputation, abusive users, report, block, online community, collaboration, source, opt out, in-app purchase, acceptable / fair use, stereotypes, targeted content, influencers, tracking, disinformation, reliability.</p> <p>To know a range of ways to report concerns and access support both in school and at home, or services such as Childline, to help someone who is being bullied online. <i>(Online bullying / Online relationships / Online reputation)</i></p> <p>To know that online bullying can differ to offline bullying and can involve a range of roles and behaviours. <i>(Online bullying)</i></p> <p>To know that abusive users are people online who may wish us harm, that this is not our fault and that they can be reported and blocked. <i>(Online bullying / Online relationships)</i></p> <p>To know how to identify abusive users online, how to block and report them, and to whom they can be reported. <i>(Online bullying)</i></p>	<p><b>To know the meaning of the terms:</b> kind/unkind, trusted adult, private, communicate, information, online, sharing online, personal information, permission, considerate, password, online identity, avatar, online bullying, username, account, profile, legal / illegal, facts, beliefs, opinions, age-restriction, copyright, digital age of consent, fake, hoax, advertising, spam, misinformation, social media, online reputation, abusive users, report, block, online community, collaboration, source, opt out, in-app purchase, acceptable / fair use, stereotypes, targeted content, influencers, tracking, disinformation, reliability, inappropriate images, boundaries, anonymity, gender roles, scams, fake profile, identify theft, phishing, terms and conditions, Creative Commons, persuasive design, verifying</p> <p>To know how someone should respond to and report online bullying in different contexts. <i>(Online bullying)</i></p> <p>To know how to safely capture online content as evidence of online bullying that has taken place. <i>(Online bullying)</i></p> <p>To know how to identify risks and signs of online bullying at home or at school, and describe a range of people or services they can access to report problems or seek support. <i>(Online bullying)</i></p> <p>To know how rude, bullying or inappropriate comments or</p>

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BECOMING INDEPENDENT SUCCESSFUL HONEST OPEN-MINDED PEOPLE

## Computing: Progression grid & vocabulary



	<p>world. (Online reputation)</p> <p>To know that information can be put online. (Online reputation)</p> <p>To know that work we create belongs to us. (Copyright &amp; ownership)</p> <p>To know that private means something that belongs only to us. (Privacy &amp; security)</p> <p>To know that we have personal information about ourselves (e.g. where we live) that we should keep private and only share with people we know and trust. (Privacy &amp; security)</p> <p>To know some simple rules that help keep us safe at home when using technology. (Health, well-being &amp; lifestyle)</p> <p>To know that we can say 'no' to things that make us feel worried. (Self-image &amp; identity)</p>	<p>(Online reputation)</p> <p>To know what information we should and should not be sharing online. (Online reputation / Privacy &amp; security)</p> <p>To know that we should talk to a trusted adult about any problems or worries about being online. (Self-image &amp; identity)</p> <p>To know that there may be people online who could make us feel sad, embarrassed or upset. (Self-image &amp; identity)</p> <p>To know how to safely find things out online, with adult help. (Technology around us / Managing online information)</p> <p>To know that any digital work we create belongs to us and should not be shared without our permission. (Copyright &amp; ownership)</p> <p>To know that any digital work others have created does not belong to us even if we have a copy of it. (Copyright &amp; ownership)</p> <p>To know that we can encounter a range of things online including things we like and don't like as well as things which are real or make believe / a joke. (Managing online information)</p> <p>To know that a password is a special word or code that only you know to help you get into something. (Privacy &amp; security)</p> <p>To know that passwords can be used to protect information and devices by stopping others getting in to them. (Privacy &amp; security)</p>	<p>someone' if we feel under pressure to agree to something we are unsure about or don't want to do. (Online relationships)</p> <p>To know that anything we share online can be copied by others and may stay there forever. (Online reputation)</p> <p>To know simple rules and guidance when we are using technology both in and beyond the home, and explain why they keep us safe. (Health, well-being &amp; lifestyle)</p> <p>To know that there are many devices in the home could be connected to the internet. (Privacy &amp; security / Managing online information)</p> <p>To know what voice-activated searching is and that it is not always correct. (Privacy &amp; security / Managing online information)</p> <p>To know how to make passwords stronger. (Privacy &amp; security)</p> <p>To know that an online identity is how someone describes or presents themselves online, and that this can be very different to their real-life identity. (Self-image &amp; identity)</p> <p>To know that an avatar is an image or icon used to represent you online and may not look like you. (Self-image &amp; identity)</p> <p>To know how and when to get help from a trusted adult, when given examples of problems about being online. (Online bullying / Online relationships / Health, well-being &amp; lifestyle)</p>	<p>To know how to avoid sharing personal information online mistakenly or without permission, and what to do if this happens. (Online relationships/Online reputation)</p> <p>To know the importance of trust online and that we must always be careful who we 'like', trust or share information with online. (Online bullying / Online relationships)</p> <p>To know that anyone can change or hide their identities online. (Self-image &amp; identity)</p> <p>To know that a username is personal code used to keep our online information private, which can be different to our real name. (Self-image &amp; identity / Privacy &amp; security)</p> <p>To know that an account stores our personal information, so we can log in to a device, website or app using a username and password. (Self-image &amp; identity)</p> <p>To know that a profile is a visible online identity that users set up when they create an account on a device, website or app. (Self-image &amp; identity)</p> <p>To know how to make choices when sharing personal information to access services/ apps, and when we are posting on those services/apps. (Privacy &amp; security)</p> <p>To know that illegal means against the law and may involve the police. (Copyright &amp; ownership)</p> <p>To know that copying or sharing someone's information, work or media online without permission is breaking copyright and is illegal.</p>	<p>places to whom they can be reported. (Online bullying)</p> <p>To know how to keep personal details private, explaining a range of methods and strategies. (Online relationships)</p> <p>To know how to explain strategies for safe and fun experiences in a range of online activities. (Online relationships)</p> <p>To know how to explain what respectful and disrespectful online behaviour looks like. (Online relationships)</p> <p>To know that our online reputation comes from information about us that may have been posted, copied or shared by others. (Online reputation)</p> <p>To know that your reputation is people's opinion of you based on what you do and say, which may be positive or negative, even if they have not met you. (Online reputation)</p> <p>To know how information about ourselves can be found out online, even if we do not intend it to be shared, and can be shared by others (e.g. likes, comments, tags) (Online reputation)</p> <p>To know how to identify who owns online content and whether we can reuse or share it or need to seek permission. (Copyright &amp; ownership)</p> <p>To know how to recognise devices for too long, describing the impact on our health and wellbeing. (Health, well-being &amp; lifestyle)</p>	<p>To know that to report is to tell those in charge of an online community about another user who is causing a problem. (Online relationships)</p> <p>To know that to block is to stop another user from being able to contact you, make comments to you or harass you online. (Online relationships)</p> <p>To know that an online community is a group of people with shared interests who meet or communicate online. (Online relationships)</p> <p>To know that collaboration is working with others to produce or create something. (Online relationships)</p> <p>To know how to make positive contributions to an online community. (Online relationships)</p> <p>To know that our online identity can be copied, changed or hidden and that we need to make responsible choices to help protect our personal information, using settings to control this. (Self-image &amp; identity)</p> <p>To know how free apps and websites collect and use our personal information and that they may share it unless we opt out. (Privacy &amp; security)</p> <p>To know that to 'opt out' means to choose not to agree to something, and that we may need to actively select this option when using apps or services. (Privacy &amp; security)</p> <p>To know that that app permissions allow access to our personal information and that the data we share is valuable to app developers.</p>	<p>activities online create risks for myself and others. (Online bullying / Online relationships / Online reputation)</p> <p>To know the possible impact of thoughtless or hasty comments in online communities, and explain how to act responsibly. (Online relationships)</p> <p>To know the possible consequences of sharing private or personal information, images or videos, and explain how to act responsibly. (Online relationships)</p> <p>To know that we all build an online reputation through our behaviour and know how to maintain a positive identity online. (Online bullying / Online relationships)</p> <p>To know that inappropriate images or videos can be embarrassing and have a deeply harmful impact for people in them and should not be shared. (Online relationships)</p> <p>To know that something which is 'inappropriate' to one person may not seem so to others, and should be discussed with a trusted adult if you are unsure. (Online relationships)</p> <p>To know that inappropriate images can involve something private, worrying, illegal, embarrassing, harmful, rude or unsuitable for your age, and are often shared maliciously or without permission. (Online relationships)</p> <p>To know that boundaries are personal limits that we do not cross, to show that we understand and respect our own needs and those of others.</p>
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# BISHOP LONSDALE CHURCH OF ENGLAND PRIMARY SCHOOL AND NURSERY

BECOMING INDEPENDENT SUCCESSFUL HONEST OPEN-MINDED PEOPLE

## Computing: Progression grid & vocabulary



				<p>To know that we can communicate with people we do not know online, so we must always be careful what we say and do. <b>Online relationships / Self-image &amp; identity / Privacy &amp; security</b></p>	<p><b>(Copyright &amp; ownership)</b></p> <p>To know that spending too much time online or using devices can have negative effects on our health and wellbeing. <b>(Health, well-being &amp; lifestyle)</b></p> <p>To know that some online activities and games have age restrictions and why it is important to follow them. <b>(Health, well-being &amp; lifestyle)</b></p> <p>To know that there is a difference between facts and beliefs or opinions and begin to identify examples of these online. <b>(Managing online information)</b></p>	<p>To know to explain a range of strategies to limit time spent online/using tech. <b>(Health, well-being &amp; lifestyle)</b></p> <p>To know that our online and real-life identities can differ and describe examples. <b>(Self-image &amp; identity)</b></p> <p>To know that others online can pretend to be someone else and suggest reasons why. <b>(Self-image &amp; identity)</b></p> <p>To know that a digital age of consent or age-restriction is a lower age-limit on who can create personal accounts to access apps and services online. <b>(Privacy &amp; security)</b></p> <p>To know that the digital age of consent is a legal protection for children's personal data and they must not access online services or apps without parental consent. <b>(Privacy &amp; security)</b></p> <p>To know that digital age of consent is needed to create a personal account on an online app or service, because they store our personal information. <b>(Privacy &amp; security)</b></p> <p>To know that internet use can be monitored and that these services are used to keep children and users safe online. <b>(Privacy &amp; security)</b></p> <p>To know how to describe strategies for keeping personal information private, depending on context. <b>(Privacy &amp; security)</b></p> <p>To know that 'fake' or 'hoax' means not real or true and that some people share information online that is not true. <b>(Managing online information)</b></p>	<p><b>(Privacy &amp; security)</b></p> <p>To know when we should or should not share content or media online, describing how and when we may need permission from the content creator. <b>(Copyright &amp; ownership)</b></p> <p>To know that 'acceptable' or 'fair use' means that small parts of content can be reused for certain purposes only (such as news reporting, teaching or research) without permission from/payment to the creator. <b>(Copyright &amp; ownership)</b></p> <p>To know that in-app purchases are where you can pay for additional content or features in an app or game, and that we must always ask an adult before buying. <b>(Health, well-being &amp; lifestyle)</b></p> <p>To know that there are benefits and risks of accessing online information about health and well-being and we should balance this with talking to trusted adults or professionals. <b>(Health, well-being &amp; lifestyle)</b></p> <p>To know that a source is where information originally came from; some sources are more reliable than others, and some may not even be a true source. <b>(Health, well-being &amp; lifestyle)</b></p> <p>To know that we need to check the accuracy of information that is shared online and consider the source and intent. <b>(Health, well-being &amp; lifestyle)</b></p> <p>To know how use of technology can affect our sleep as well as physical and mental health and describe strategies to promote healthy usage. <b>(Health, well-being &amp; lifestyle)</b></p>	<p><b>(Online relationships)</b></p> <p>To know how to respond when we encounter inappropriate content online accidentally. <b>(Managing online information)</b></p> <p>To know how to show respect for each other's boundaries online, particularly regarding sharing information or content. <b>(Online relationships)</b></p> <p>To know that anonymity means to not be known, and online this can mean not showing or sharing unnecessary personal details or opting out of data tracking. <b>(Online reputation)</b></p> <p>To know and explain strategies anyone can use to protect their online reputation, including how anonymity can protect your personal data. <b>(Online reputation)</b></p> <p>To know that gender roles refers to the (often fixed) ideas that people have about what males or females should be like or what they are allowed to do. <b>(Self-image &amp; identity)</b></p> <p>To know that social media can influence our ideas or judgements about gender roles, and how to challenge inappropriate messages. <b>(Self-image &amp; identity)</b></p> <p>To know how to recognise and select effective strategies for managing passwords. <b>(Privacy &amp; security)</b></p> <p>To know that scams are online messages or content that target people to trick, harm, or to steal personal information or money illegally. <b>(Privacy &amp; security)</b></p> <p>To know that a fake profile is where someone uses false</p>
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						<p>To know that an online hoax or fake news can be designed to affect someone's emotions and behaviour, and explain why this may be harmful. <i>(Managing online information)</i></p> <p>To know how to differentiate between facts, beliefs and opinions online, giving examples of each. <i>(Managing online information)</i></p> <p>To know that advertising is where a person or business is trying to persuade us to buy or use something. <i>(Managing online information)</i></p> <p>To know that there is a range of methods used to advertise online and adverts can be presented as other formats in order to mislead or attract 'clicks'. <i>(Managing online information)</i></p> <p>To know how to recognise some of the methods used to encourage people to buy things online (e.g. advertising offers; in-app purchases, pop-ups). <i>(Managing online information)</i></p> <p>To know that online bots are programs that can quickly and automatically send, like or re-share information, and reply in chat/comments like a person. <i>(Managing online information)</i></p> <p>To know that misinformation is factually incorrect information that is spreads and repeated online so much that people mistakenly believe it is true. <i>(Managing online information)</i></p> <p>To know that spam is unwanted and excessive advertising sent to people online without being asked for. <i>(Managing online information)</i></p>	<p>To know how the internet can draw us to information for different agendas (e.g. pop-ups, targeted ads, personalised content, fake notifications). <i>(Managing online information)</i></p> <p>To know that targeted content is created from data and personal information gathered by companies that are tracking our activities online. <i>(Managing online information)</i></p> <p>To know that we can manage our privacy settings, opt out of tracking or seek adult help about our data being collected for targeted content. <i>(Managing online information)</i></p> <p>To know that that advertising online can be disguised as information or as sponsored or boosted content (e.g. pop-up messages, news articles, social media posts). <i>(Managing online information)</i></p> <p>To know that influencers are people that influence others to emulate their behaviour, likes or choices; they are often very popular figures on social media with many followers. <i>(Managing online information)</i></p> <p>To know that some influencers are paid to promote products or services by companies and advertisers and this may not be made clear to their followers. <i>(Managing online information)</i></p> <p>To know how to identify when online content has been commercially sponsored. <i>(Managing online information)</i></p> <p>To know how stereotypes and can be amplified/reinforced online and how this is used to influence people's opinions. <i>(Managing online information)</i></p>	<p>information on their profile to hide their real identity. <i>(Privacy &amp; security)</i></p> <p>To know that people can steal someone else's identity online or set up fake profiles to copy others. <i>(Privacy &amp; security)</i></p> <p>To know that identity theft is stealing someone's online identity, often preventing them from using their own as a result. <i>(Privacy &amp; security)</i></p> <p>To know that phishing is where someone tries to trick people into giving out private personal information using fake messages or warnings. <i>(Privacy &amp; security)</i></p> <p>To know how to identify, flag and report fake or misleading content and attempted scams. <i>(Privacy &amp; security)</i></p> <p>To know that online services have terms and conditions say what the company is allowed to do and what a user is allowed to do. <i>(Privacy &amp; security)</i></p> <p>To know that 'free' apps may sell your personal data, images or videos to make money for themselves, so we should always check their terms and conditions first. <i>(Privacy &amp; security)</i></p> <p>To know how and why it is important that people should keep their software and apps up to date. <i>(Privacy &amp; security)</i></p> <p>To know that Creative Commons is a method for copyright holders to give others the right to reuse their content in different ways. <i>(Copyright &amp; ownership)</i></p>
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						<p>I can explain how bots can be used online to impersonate people to amplify and spread misinformation or spam. (Managing online information)</p>	<p>To know that disinformation is untrue or inaccurate information that is shared deliberately to mislead people. (Managing online information)</p> <p>To know that reliability is how trustworthy or accurate information might be. (Managing online information)</p> <p>To know that we need to evaluate the sources of online information before we forward or share content, to not spread hoaxes, misinformation and disinformation. (Managing online information)</p> <p>To know how to evaluate the reliability of online information and be sceptical about sources. (Managing online information)</p>	<p>To know how to find copyright-free content and acknowledge the creators and sources of content we have reused from the internet. (Copyright &amp; ownership)</p> <p>To know that there are rules and guidance about age-related content and age-restrictions on many apps and social media. (Health, well-being &amp; lifestyle)</p> <p>To know common systems that regulate age-related content (e.g. PEGI, BBFC, parental warnings) and describe their purpose and why they should be adhered to. (Health, well-being &amp; lifestyle)</p> <p>To know strategies to limit the negative effects of overuse of technology and explain the importance of self-regulation of time spent online. (Health, well-being &amp; lifestyle)</p> <p>To know how to recognise and discuss the pressures that technology can place on someone and how / when they could manage this. (Health, well-being &amp; lifestyle)</p> <p>To know how to recognise features of persuasive design and how they are used to keep users engaged or manipulate them. (Managing online information)</p> <p>To know some strategies to reduce the effect of persuasive design features. (Managing online information)</p> <p>To know that verifying means to check whether something is true or accurate. (Managing online information)</p> <p>To know how to evaluate and verify the validity of 'facts' and</p>
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								<p>information online, distinguish facts from opinions and explain why these strategies are important. (Managing online information)</p> <p>To know how to describe the difference between online misinformation and dis-information. (Managing online information)</p> <p>To know that information that is on a large number of sites may still be inaccurate or untrue and assess how this happens. (Managing online information)</p>
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