

Long Knowle Primary School
Computer Skills Progression Grid 2019



	E Safety	Computer Science	Information Technology	Digital Literacy
Emerging knowledge, skills and concepts	<p>I know to tell a grown up if something “goes wrong” when using technology.</p> <p>I can ask an adult when I want to use the Internet.</p> <p>I can be kind to my friends.</p> <p>I can talk about what I do online and how much I use technology.</p> <p>I can explain why I am only allowed to use certain programs on a device.</p>	<p>I can recognise that many different everyday devices, including toys, respond to signals and instructions.</p> <p>I can make choices when using such devices to produce different outcomes.</p> <p>Understand and sometimes use everyday language to describe position, for example under, in, on, between, over.</p> <p>Be able to order a collection of pictures into the correct sequence.</p> <p>I know that some technology needs instructions</p> <p>I can give a Beebot or a programmable toy an instruction.</p>	<p>I know that computers and other digital objects don’t work unless they are switched on.</p> <p>I am careful with technology devices.</p> <p>I know how to switch a variety of devices on/off.</p> <p>I can talk about how I use controls and technology in the home and outside school.</p>	<p>I can visit websites such as CBeebies and play games.</p> <p>I can use software under the control of the teacher to show my learning:</p> <ul style="list-style-type: none"> • Pictures • Retrieve a photo/video • Combine text and sounds • Move objects on a screen • Create shapes

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<p>Year 1/2</p> <p>Expected by the end of KS1 (Year 2)</p>	<p>I know that if I see something online that I do not like to tell an adult.</p> <p>I know not to share any information about myself on a computer.</p> <p>I can talk about why it is important to be kind and polite online and in real life.</p> <p>I know that not everyone is who they say they are on the internet.</p>	<p>I can understand what algorithms are and give an example of an algorithm. (away from the computer eg: a story/instructions/dance routines etc and on the computer: BeeBots and Scratch)</p> <p>I can explain how my simple program works.</p> <p>I can create simple programs (set of algorithms) using different apps/software</p> <p>I know that algorithms need to be precise and logical.</p> <p>I can execute (run) a program</p> <p>I can debug an algorithm when something goes wrong or I need to change the programming. (output)</p> <p>I can use logical reasoning to predict the behaviour of a simple program.</p> <p>I can use directional language such as forward, backwards, left and right both at and away from the computer.</p>	<p>I can explain how I use different controls and technology at home. I can give examples such as online shopping, games online, accessing Internet browser.</p> <p>I can collect class data and present my findings using an appropriate program.</p> <p>I can use a data logger with support to collect information from the environment and interpret the findings.</p> <p>I am starting to understand that other people have created the information I use online.</p> <p>I can talk about the difference between the Internet and things in the physical world.</p> <p>I can use the keyboard on my device to add, delete and space text for others to read.</p>	<p>I can use technology purposefully to create a range of content independently.</p> <p>I can store, organise and retrieve my digital content on the computer with support. (school server or Purple Mash)</p> <p>I can combine content such as text, images and sound to create a finished presentation or movie.</p> <p>I present my digital content in school.</p> <p>I can talk about my work and that of others and suggest changes to improve it.</p> <p>I can browse Internet Services as directed by the class teacher.</p> <p>I can identify benefits of using technology including finding information, creating and communicating.</p> <p>I can tell you about an online tool that will help me share my ideas with other people.</p> <p>I can create a hyperlink to a resource on the World Wide Web.</p>

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<p>Year 3/4</p> <p>Expected by the end of LKS2 (Year 4)</p>	<p>I can use a computer safely and responsibly, knowing how to report unacceptable behaviours online.</p> <p>I know what is acceptable and unacceptable behaviour when using technology and online services. (eg; correct language , use of capital letters etc)</p> <p>I can talk about what makes a secure password and why they are important.</p> <p>I can recognise games and appropriate websites for my age.</p> <p>I can make good choices about how long I spend online and give advice to others.</p> <p>I ask an adult before downloading files and games from the Internet.</p> <p>I can use the safety features of websites as well as reporting concerns to an adult.</p>	<p>I know that algorithms are implemented on digital devices as programs.</p> <p>I can find and correct errors i.e. debugging, in algorithms.</p> <p>I can use logical reasoning to explain how some simple algorithms work.</p> <p>I can write and debug programs that accomplish specific goals including controlling or simulating physical systems.</p> <p>I can solve problems by decomposing them into smaller parts.</p> <p>I can design algorithms that start to use if statements or loops with guidance.</p> <p>I can use sequence in programs</p> <p>I can use selection in programs.</p> <p>I can use repetition in programs.</p> <p>I can work with variables and various forms of input and output in programs.</p> <p>I can identify that there are different types of algorithms depending on the program used; they are like different languages.</p> <p>I know that I need to keep testing my program while I am putting it together.</p> <p>I recognise that using algorithms will also help solve problems in other learning such as Maths, Science and Design and Technology.</p>	<p>I understand what a computer network is and can draw a diagram of our school network.</p> <p>I understand the internet can provide multiple services, such as the world wide web.</p> <p>I can use search tools to find and use an appropriate website.</p> <p>I understand that the internet offers many opportunities for communication and collaboration.</p> <p>I can name some common input and output devices</p> <p>I can use a simple database and sort information.</p> <p>I know the difference between hardware – parts of a computer -and application software – software you can run on a computer i.e. word, Power Point</p> <p>I can use data loggers to collect data such as light/sound and discuss findings.</p> <p>I can use a sensor to detect a change, which can select an action within my program.</p>	<p>I can navigate the web and can carry out simple web searches to collect digital content.</p> <p>I know the difference between an internet browser and a search engine.</p> <p>I can name a popular internet browser; Explorer, Chrome and Safari.</p> <p>I know the difference between the internet and internet service e.g. world wide web, email, web conferencing.</p> <p>I can use a variety of software to manipulate and present digital content: and information.</p> <p>I can tell you whether a resource I am using is on the Internet, the school network or my own device.</p> <p>I can tell you how to check who owns photos, text and clipart.</p> <p>I think about the reliability of information I read on the World Wide Web.</p> <p>I can prove that the hyperlink I have created works and can explain how it is going to be used as part of the learning task.</p> <p>I can describe the ways in which websites advertise their products to me.</p> <p>I can use a spell checker to write and review my work.</p> <p>I can use photos, video and sound to create an atmosphere when presenting to different audiences.</p> <p>I am confident to explore new media to extend what I can achieve.</p>

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<p>Year 5/6</p> <p>Expected by the end of KS2 (Year 6)</p>	<p>I can show responsible use of technologies and online services.</p> <p>I know a range of ways to report concerns.</p> <p>I know what is acceptable and unacceptable behaviour when using technology and online services. (eg, correct language, use of capital letters etc)</p> <p>I can choose a secure password and screen name and protect this information.</p> <p>I know that anything I post online can be seen, used and may affect others.</p> <p>I can talk about the dangers of spending too long on line or playing a game.</p> <p>I protect my device from harm on the Internet.</p> <p>I can understand the consequences to myself and others by not communicating kindly and respectfully.</p> <p>I can understand the consequences of sharing too much about myself online.</p>	<p>I can write and debug programs that accomplish specific goals including controlling or simulating physical systems.</p> <p>I can work with variables to increase programming possibilities.</p> <p>I can use selection and repetition in sequences to create a program.</p> <p>I know that different solutions exist for the same problem.</p> <p>I know the difference between, and I can use if, then and else statements.</p> <p>I understand that some devices operate automatically and that things do not happen without cause and effect.</p> <p>I can show an awareness of tasks best completed by humans or computers.</p> <p>I can sequence a set of instructions in the correct order and recognise the need for precision.</p> <p>I can change an input to a program to achieve a different output.</p> <p>I can talk about how a digital model can provide information about a physical system.</p>	<p>I can name some common input and output devices.</p> <p>I can use a simple database and sort information to provide proof to answer questions.</p> <p>I know the difference between data and information and I can analyse and evaluate it, and I know that poor quality data leads to unreliable results, and inaccurate conclusions.</p> <p>I know the difference between hardware, parts of a computer and application software.</p> <p>I know the main functions of the operating system to make the hardware work.</p> <p>I know the difference between physical, mobile and wireless networks.</p> <p>I can use data loggers to collect light/sound data to discuss findings.</p> <p>I can use a spreadsheet and database to collect and record data.</p> <p>I can search a database using different operators to refine my search.</p>	<p>I can use filters or can perform single criteria searches for information.</p> <p>I can identify major internet browsers including Internet Explorer, Chrome and Safari.</p> <p>I know how to effectively use search engines to check and validate information found including that search engines use 'web crawler' programs.</p> <p>I can take account of accuracy and potential bias when searching for information and appreciate how search results are ranked.</p> <p>I can perform more complex searches for information.</p> <p>I can select, combine and use internet services.</p> <p>I can make judgements about digital content when evaluating and repurposing it for a given audience.</p> <p>I know the potential of information technology for collaboration when computers are networked.</p> <p>I can use a range of software/apps imaginatively to create digital content for a desired audience.</p> <p>I can use different online communication tools for different purposes.</p> <p>I can find out whom the information on webpage belongs to.</p> <p>I describe the different parts of a webpage.</p> <p>I can recognise that websites use different methods to advertise products.</p>

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Achieving Greater Depth end of KS2	I am pro-active in 'policing' E-Safety online and know the appropriate way of dealing with this.	<p>I can deconstruct a problem into smaller steps, recognising similarities to solutions used before.</p> <p>I can use logical reasoning to detect and correct errors in algorithms and programs.</p> <p>I can use a variable and operators to stop a program.</p> <p>I can evaluate the effectiveness and efficiency of my algorithm while I continually test the programming of that algorithm.</p>	<p>I can evaluate the data I have collected and use it to inform my learning journey further.</p> <p>I can independently and effectively use the skills I have developed to interrogate a database.</p> <p>I can be digitally discerning when evaluating the effectiveness of my own work and the work of others.</p>	<p>Confidently use a range of devices, apps and digital content to be creative in presenting information.</p> <p>Actively explore different ways to present information and inform an adult about it and how it could be used.</p> <p>I can evaluate the effectiveness of how information is transported on the Internet and can state alternative ways they would provide a better service.</p>