



Curriculum Progression Map

Computing



Early Years Foundation Stage	Key Stage One
<p><u>Development Matters</u> <u>Understanding the World</u></p> <p>.</p> <p><u>Early Learning Goal</u></p> <p>Children recognise that a range of technology is used in places such as homes and schools. They select and use technology for particular purposes</p>	<p>National Curriculum Programme of Study Pupils should be taught to: understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions. Create and debug simple programs. Use logical reasoning to predict the behaviour of simple programs. Use technology purposefully to create, organise, store, manipulate and retrieve digital content. Recognise common uses of information technology beyond school. Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies</p> <hr/> <p>Key Stage Two</p> <p>National Curriculum Programme of Study Pupils should be taught to: design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. Use sequence, selection, and repetition in programs; work with variables and various forms of input and output. Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs. Understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration. Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content. Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information. Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.</p>

EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
	<p>Know what information should be kept private and you should not trust every person that you meet.</p> <p>Know the need to be kind in person and online. Know that they should ask a trusted adult before they share information online.</p> <p>Know that some websites and games are not suitable for their age</p> <p>Know that adults may limit their time online to keep them mentally and physically healthy</p> <p>Know that a password is a secret word, usually made of letters or numbers that lets you login to a computer.</p> <p>Know that there may be people who online who could make me feel sad, embarrassed or upset and how to deal with these feelings.</p>	<p>Know what information should be kept private, giving examples of what you should not share online</p> <p>Know the need to be kind in person and online and what to do if someone is unkind</p> <p>Know how to choose an appropriate website using symbols and age ratings</p> <p>Know how rules and guidance on online time and usage can help to keep me healthy physically and mentally</p> <p>Know and explain some rules for keeping personal information private. Know why we use passwords and ways in which we use them when accessing technological devices.</p> <p>Know examples of when I might feel negative emotions online and give examples of how I might get help. Know that people can change their real identity online.</p>	<p>Know ways to keep personal information private and how to use the safety features of a website. Know the risks of communicating online with people they don't know well.</p> <p>Know what bullying is and ways this can happen online. Know rules to behave online and how to follow them</p> <p>Know that some websites and games can be appropriate and inappropriate for their age.</p> <p>Know the negative effect/impact of using too much technology can sometime have on people. Give some examples of activities where it is easy to spend too much time engaged.</p> <p>Know reasons why they should share information only with people they trust. Know strategies for creating and keeping passwords private and know the consequences if you don't. Know that connected devices can collect and share their information.</p> <p>Know what is meant by the term identity. Know ways in which you can change your identity depending on what you are doing (e.g. using an avatar)</p>	<p>Know how to describe strategies for safe and fun experiences and know examples of how to keep themselves safe and how to report concerns online and in real life</p> <p>Know some online technologies where bullying make take place and how. Know the need to consider how negative actions online can affect themselves and others.</p> <p>Know that some websites will contain false information or images</p> <p>Know ways in which technology can distract people from things they should or could do instead. Know how to identify times or situations where technological use might need to be limited.</p> <p>Know strategies for strong passwords and keeping personal information private depending on the context. Know how the internet and social platforms can be monitored and reasons for this.</p> <p>Know that online identities can be different to the way people can present in real life. Know right ways in which to interact with others and their perception.</p>	<p>Know that there are some people online who may wish to do harm. Know that this is not okay and give ways to raise concerns or worries.</p> <p>Know how to give examples of how to develop a positive online presence. Know that anything they post/share could be seen or used by others and used negatively. Know how to get help for themselves or others</p> <p>Know how to identify fake news, explain its purpose and describe how it impacts society.</p> <p>Know that technology use can have affect us emotionally and physically with a focus on sleep. Know how to identify strategies, tips or advice to promote a healthy lifestyle.</p> <p>Know how to create and use strong passwords. Know that some internet sites/apps will use and share their data. Know how to access and increase privacy on apps and services. Know what to do if their password is lost or stolen.</p> <p>Know that identities online can be copied, modified or altered. Know the need to demonstrate responsible choices with their online identity depending on context</p>	<p>Know why not to share personal info or images online with strangers and that some online users may intend harm. Know how to respond to inappropriate online behaviour and seek help.</p> <p>Know the consequences of online behaviour on themselves and others, especially rash and impulsive communication. Know how to support others in making good choices and ways to report concerns</p> <p>Know how to distinguish between appropriate and inappropriate online behaviours (and between free and hate speech).</p> <p>Know the mental and physical impact of technology on our lives and strategies to address these (e.g. posture, sleep, diet and exercise). Know the importance of self-regulation in usage.</p> <p>Know to use different passwords for a range of online services; a range of strategies to keep personal information safe online and whilst using apps. Know some ways in which online contents targets people for money or information illegally</p> <p>Know how to manage feelings from online issues that might make them feel negatively. Know the importance of rejecting inappropriate messages (e.g. gender roles)</p>

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Computer Science		<p>Know an algorithm is steps to solve a problem, and a program is the code a computer follows.</p> <p>Know how to write simple steps (an algorithm) and how to find when steps are in the wrong order.</p> <p>Know that wrong results come from their code and how to try to fix it.</p> <p>Know how to read code one line at a time and understand it.</p> <p>Know how to guess what a simple program will do.</p>	<p>Know an algorithm is a set of instructions to complete a task and how to make a simple program to do a job.</p> <p>Know they need clear and exact steps in their design so it can become code.</p> <p>Know how to find and fix some mistakes in their programs.</p> <p>Know what parts of a program do when something happens.</p> <p>Know how to explain what will happen in the program.</p>	<p>Know how to break real-life problems into simple steps to make an algorithm.</p> <p>Know their design shows how they think about the task and change it into code to create a programme with simple steps</p> <p>Know how to find and fix mistakes that stop the program from working.</p> <p>Know how to use timers to make parts of their program repeat.</p> <p>Know how to read programs with many steps and predict what will happen</p> <p>Know different ways the Internet is used to communicate.</p>	<p>Know how to turn real-life tasks into algorithms by planning how to do them using coding ideas.</p> <p>Know their program needs clear, simple steps using use inputs and outputs.</p> <p>Know how to follow code step by step to find mistakes and try to fix them.</p> <p>Know how to use timers to make things repeat and how to use 'IF' and variables in their code.</p> <p>Know how to read multi-step programs like Logo and predict what will happen.</p> <p>Know how computers connect in a network and know how to share their work with others online safely.</p>	<p>Know how to break big problems into smaller steps to make algorithms.</p> <p>Know how to turn algorithms with steps, choices, and repeats into code and plan their designs to complete the task.</p> <p>Know how to use different coding tools to make their designs work.</p> <p>Know how to test their programs and find mistakes, sometimes with help.</p> <p>Know how to use variables and different kinds of inputs and outputs in their programs.</p> <p>Know why computer networks are important and the risks they bring.</p>	<p>Know how to break a big task into smaller steps using coding skills.</p> <p>Know how to write code with steps, choices, and repeats, including using them inside each other.</p> <p>Know how to understand parts of a program and explain how they work together.</p> <p>Know how to test and fix their code by finding bugs step by step.</p> <p>Know how to use variables, sounds, movements, and button clicks in their programs.</p> <p>Know the Internet and World Wide Web are different. Know what WAN and LAN are and how to use the Internet at school.</p>
Information Technology		<p>Know how to name, save, and open their files.</p> <p>Know how to follow instructions to use online tools and resources.</p> <p>Know how to sort, edit, and save simple digital work.</p> <p>Know how to use programs to create and organise content.</p>	<p>Know how to create, name, save, and open their work confidently.</p> <p>Know how to organise and search for data using tools</p> <p>Know how to edit more complex digital content</p> <p>Know how to use different media like photos, text, and sound in their digital work</p>	<p>Know how to use simple searches and a search engine to find information online.</p> <p>Know how to collect, look at, and share information using different software.</p> <p>Know how to choose the best software for the task.</p>	<p>Know what a search engine is and how it works and how to check if a webpage is trustworthy and useful.</p> <p>Know how to choose the right software to present and share information.</p> <p>Know how to improve digital work using feedback.</p>	<p>Know how to pick the best way to communicate online for the audience and message.</p> <p>Know how to work with others to create and share digital content.</p> <p>Know how to make digital work better using feedback and say what worked well, revising other people's digital work fairly</p>	<p>Know how to use filters to find digital content and how to check if a webpage is reliable and accurate</p> <p>Know how to create digital content that fits the audience.</p> <p>Know how to check digital work for quality and make it better.</p>