



Subject Knowledge and Skills Progression- Nursery to Year 6



Skills	Nursery	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Digital Literacy	<p>Use technology for a particular purpose (guided access)</p> <p>Learn how to take a photograph on a tablet.</p>	<p>Select and use technology for a particular purpose.</p> <p>Turn an iPad on and off.</p> <p>Find the camera and take an appropriate photo.</p>	<p>Use technology to create, store and retrieve digital content.</p> <p>Begin to know how to use an iPad to access different apps.</p>	<p>Use technology purposefully to create, store, retrieve, organise and manipulate digital content.</p> <p>Independently use an iPad to access different apps.</p>	<p>Use a variety of software on digital devices.</p> <p>Confidently use an iPad/laptop to access different apps/program</p>	<p>Select and use a variety of software on digital device</p> <p>Troubleshoot a device that is working incorrectly.</p>	<p>Express own ideas by selecting, using and combining a variety of software on digital devices to design and create programs.</p>	<p>Express own ideas by selecting, using and combining a variety of software on a range of digital devices to create programs.</p>
e-safety	<p>Take turns when using a screen using a timer.</p>	<p>Recognise that a range of technology is used in places such as home and school.</p> <p>Understand sensible screen time and the importance of taking a break from a screen.</p> <p>Begin to understand how to use technology safely.</p>	<p>Develop an understanding of how to use technology safely</p> <p>Know where to go for help/support when they have concerns about content/contact on internet.</p> <p>Know how to use the internet and digital devices for everyday purpose.</p> <p>Know how to communicate online.</p>	<p>Use technology safely and respectfully, keeping personal information private.</p> <p>Identify where to go for help/support when concerned about content/contact on internet/other online technologies.</p> <p>Know how to use the internet in everyday life: online content and information.</p> <p>Know the</p>	<p>Use technology safely, respectfully, and responsibly</p> <p>Recognise acceptable/unacceptable behaviour and identify ways to report concern about content and contact.</p> <p>Know how the internet is used and how to assess information online.</p>	<p>Recognise acceptable/unacceptable behaviour and identify ways to report concerns about content and contact.</p> <p>Know how data is shared and used.</p> <p>To know how spending too much time online can contribute to an unhealthy lifestyle.</p>	<p>Confidently, competently and responsibly use information and communication technology.</p> <p>Understand the need to select age-appropriate content.</p> <p>Know how information online is targeted; different media types, their role and impact.</p> <p>To explain how spending too much time online can affect health.</p> <p>To understand</p>	<p>Confidently, competently and responsibly use information and communication technology.</p> <p>Identify a range of ways to report concerns about content and contact in and out of school.</p> <p>To be able to discuss the pros and cons of different social media apps.</p> <p>Know how to evaluate media sources: sharing things online.</p> <p>To understand</p>



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				appropriate amount of time to be spent online for a healthy lifestyle.			the risk of online scam	the health benefits of a balanced lifestyle To communicate how we can make the online world a better place. To understand the impacts of gender stereotypes
Information Technology	Engage in a range of apps to support own learning.	Recognise that a range of technology is used in places such as home and schools. Know that we can use the internet to find out more information and use it in our own enquiries.	Begin to recognise common uses of information technology beyond school. Use technology purposefully to create digital content	Recognise common uses of information technology beyond school. Begin to know how to use a search engine with key words Use technology purposefully to create digital content comparing the benefits of different programs With support, plan a project which uses	Use some search technologies effectively and appreciate how results are selected and ranked. Decide which questions to ask when using search engines With support, select and use a variety of software to accomplish goals. Use a variety of software on digital devices to collect and interpret data. Use a camera to produce and edit high quality digital images and videos.	To know how to filter images by usage rights. Evaluate the reliability of digital content. Begin to ask and answer questions based on the reliability of digital content. To independently plan a project which uses multimedia Begin to independently select and use a variety of software to accomplish goals. In groups edit and present a project	Use a wide range of search technologies effectively and appreciate how results are selected and ranked. Be discerning in evaluating the reliability of digital content. To plan a project for real world purpose To understand AR technology and its uses in the wider world	Appreciate how search results are selected and ranked. To create digital graphics and illustrations To use a video editing app to create a project To plan, create and present a project To understand and be able to discuss real world purposes for skills learnt



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				<p>multimedia.</p> <p>Animate objects to tell a simple story</p> <p>Collect and sort data</p>		<p>To begin to understand real world purposes for the skills learnt.</p> <p>Collect and represent data</p>	<p>To understand VR technology and its uses in the wider world</p> <p>Independently select, use and combine a variety of software for a task.</p> <p>Independently select, use and combine a variety of software to design and create content for a given audience.</p> <p>To use a reverse search image tool</p> <p>To create a spreadsheet with columns and rows and input data into it</p>	<p>To improve the quality and presentation of work using editing and formatting techniques</p> <p>To understand the evolution of money and the move to digital currency</p> <p>To create AI-Text- image</p> <p>To assess data</p>
Computer Science	Understand "cause and effect"- click or press to make something happen.	Explore "cause and effect" when selecting/pressing different buttons. Program simple robots by commanding	Begin to develop an understanding of algorithms. Begin to understand that programs work	Understand what algorithms are. Understand how algorithms are implemented as programs on digital devices.	Start to use reasoning to understand how algorithms work. Detect errors in algorithms and programs.	Use logical reasoning to understand how algorithms work Detect and correct errors in algorithms and programs.	Write and debug programs that accomplish specific goals, including controlling or simulating physical	Design and write programs that accomplish specific goals, including controlling or simulating physical



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		different directions	<p>by following instructions.</p> <p>Create simple programs and begin to debug them.</p> <p>Develop reasoning to predict the behaviour of simple programs.</p> <p>Begin to understand what a repeat block does</p>	<p>Understand that programs work by following clear instructions i.e. block coding</p> <p>Use logical reasoning to predict the behaviour of simple programs.</p> <p>Create and debug simple programs.</p> <p>Use a repeat block effectively.</p> <p>To begin to understand real world purpose for coding.</p>	<p>Begin to solve problems by decomposing them into smaller parts.</p> <p>Begin to work with various forms of input/output</p> <p>To use logical reasoning to create a program.</p> <p>To use block command to control movement and behaviour of sprites</p> <p>To understand what computational thinking is</p> <p>To understand real world purposes of coding</p>	<p>Start to use repeat command statements in programs.</p> <p>Work with variables and various forms of input/output</p> <p>Create and manipulate game variables</p> <p>To design and export characters, backgrounds and objects that are appropriate for the target audience.</p> <p>Import game graphics in a format compatible with the coding software</p> <p>Understand that there are different types of command used in programs.</p> <p>Design, build and program models that use sensors to control a mechanism</p> <p>Begin to understand binary code.</p> <p>To begin to create code for real world purposes</p>	<p>systems.</p> <p>Solve problems by decomposing them into smaller parts.</p> <p>Use sequence, selection and repetition in programs.</p> <p>Accurately manipulate variables in various forms of input/output</p> <p>Use logical reasoning to understand how algorithms work and detect and correct errors in algorithms and programs.</p> <p>To understand how to create a repeat loop</p> <p>Independently design, build and program models that use sensors to control a mechanism.</p>	<p>systems.</p> <p>To debug a program explaining errors you find and how to fix them</p> <p>To independently add improvements to a program</p> <p>To understand and use broadcasts as event triggers</p> <p>To understand how a conditional statement can be used in a program to change the value of a variable.</p> <p>Securely use logical reasoning to understand how algorithms work.</p> <p>To independently create a repeat loop</p>
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