



Darley Dene Primary School - Computing Progression

Intent: Every child should have the right to access technology to enable them to participate effectively and safely in this ever evolving digital world. In a technology driven society that is constantly growing, we want to equip children from all backgrounds to be able to compete in a future career of their choice; regardless of whether they are able to access this technology at home. Children will be given varied computing learning experiences which will include all the different aspects of the computing curriculum. These will enable them to use computational thinking to understand how digital systems work and how to put this knowledge to use through programming. We believe that computing is essential and should be woven in to be an integral part of the curriculum as a whole. We follow the Teach computing scheme and to ensure we cover online safety, we use National Online Safety to bring an element of online safety to each lesson.

Nursery	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
E-Safety							
To listen to music, stories and play games on different devices. To explore with different equipment in continuous provision.	Recognise that a range of technology is used in places such as home and schools. Listening to stories and music on a device. Being safe	Develop an understanding of how to use technology safely Know where to go for help and support when they have concerns about content/contact on internet	Use technology safely and respectfully, keeping personal information private. Identify where to go for help/support when concerned about content/contact on the internet/other	Use technology safely, respectfully, and responsibly. Recognise acceptable/unacceptable behaviour and identify ways to report concerns about content and contact.	Recognise acceptable/unacceptable behaviour and identify ways to report concerns about content and contact.	Confidently, competently and responsibly use information and communication technology.	Confidently, competently and responsibly use information and communication technology.

	<p>online and with equipment.</p> <p>To take a photo on a device and use it correctly.</p> <p>Playing games on the interactive whiteboard.</p> <p>Exploring keyboards</p> <p>Using I pads safely (photo taking)</p> <p>Using a computer programme to mark make I can draw</p>	<p>and retrieve digital content.</p> <p>.</p>	<p>online technologies.</p>				
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	on a device Use basic coding language when retelling stories						
Computer Science							
		<p>Begin to develop an understanding of Algorithms.</p> <p>Begin to understand that programs work by following instructions.</p> <p>Create simple programs and begin to debug them (beebots)</p> <p>Develop reasoning to predict the</p>	<p>Understand what algorithms are.</p> <p>Understand how algorithms are implemented as programs on digital services.</p> <p>Understand that programs execute by following precise and unambiguous instructions.</p> <p>Use logical reasoning to predict the</p>	<p>Start to use reasoning to understand how algorithms work.</p> <p>Detect and use a variety of software on digital devices.</p> <p>Begin to solve problems by decomposing them into smaller parts.</p> <p>Start to use sequencing</p>	<p>Use logical reasoning to understand how algorithms work.</p> <p>Detect and correct errors in algorithms and programs.</p> <p>Start to use sequence, selection and repetition in programs.</p> <p>Write and debug programs that accomplish specific goals,</p>	<p>Write and debug programs that accomplish specific goals, including controlling or simulating physical systems.</p> <p>Solve problems by decomposing them into smaller parts.</p> <p>Use sequence, selection and repetition accurately in programs.</p>	<p>Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems.</p> <p>Solve problems by decomposing them into smaller parts.</p> <p>Use sequence, selection and repetition accurately in programs.</p>

		behaviour of simple programs.	behaviours of simple programs. Create and debug simple programs.	and selection in programs. Begin to develop understanding of how to write and debug programs that accomplish specific goals, including controlling or simulating physical systems. Begin to work with various forms of input/output.	including controlling or simulating physical systems. Begin to solve problems by decomposing them into smaller parts. Work on variables and various forms of input/output.	Accurately manipulate variables and various forms of input/output. Use logical reasoning to understand how algorithms work and detect and correct errors in algorithms and programs.	Accurately manipulate a wide range of variables and various forms of input/output. Securely use logical reasoning to understand how algorithms work and detect and correct errors in algorithms and programs.
Digital Literacy							
	Select and use technology for a particular purpose	Use technology to create, store and retrieve digital content.	Use technology to create, store, retrieve, organise and manipulate digital content.	Use a variety of software on digital devices.	Select and use a variety of software on digital devices.	Express own ideas by selecting, using and combining a variety of software on digital devices.	Express own ideas by selecting, using and combining a variety of software on digital devices and create programs.

Information Technology							
	Recognise that a range of technology is used in places such as home and schools.	Begin to recognise common uses of information technology beyond school.	Recognise common uses of information technology beyond school.	<p>Show emerging understanding of computer networks including the internet and how they provide multiple services such as the World Wide Web.</p> <p>Use some search technologies effectively and appreciate how results are selected.</p> <p>Decide which questions to ask when using search engines.</p>	<p>Understand computer networks including the internet and how they provide multiple services such as the World Wide Web.</p> <p>Use search technologies effectively and appreciate how results are selected and ranked. Evaluate the reliability of digital content.</p> <p>Begin to ask and answer questions based on the reliability of digital content.</p>	<p>Recognise the opportunities computer networks offer for communication and collaboration. Use a wide range of search technologies effectively and appreciate how results are selected and ranked.</p> <p>Be discerning in evaluating the reliability of digital content.</p>	<p>Use the opportunities computer networks offer for communication and collaboration.</p> <p>Appreciate how results are selected and ranked and use them to retrieve accurate content.</p> <p>Be discerning in evaluating the reliability of digital content.</p>

Highlighted Text = Sonar Objectives

Italicized Text = ELGs