

Subject: Computing

Lead: Miss. R. Hornby

	<u>Autumn</u>	<u>Spring</u>	<u>Summer</u>
Reception	<u>All about me</u>	<u>Animals</u>	<u>Travel</u>
NC Strand:	<p>Understanding the World (Specific Area)</p> <ul style="list-style-type: none"> Technology: children recognise that a range of technology is used in places such as homes and schools. They select and use technology for particular purpose. <p>Explore toys that simulate control devices e.g., traffic lights, scanner, microwave, cash tills, with the intention of finding out how it works.</p> <p>Explore the commands needed to control a range of electronic toys.</p>	<p>Understanding the World (Specific Area)</p> <ul style="list-style-type: none"> Technology: children recognise that a range of technology is used in places such as homes and schools. They select and use technology for particular purpose. <p>Explore ways of making and listening to sounds using programs and devices.</p> <p>Interact and explore their environment using a range of multimedia equipment, including digital cameras, video cameras, microscopes etc. This could also include the use of tablets e.g. iPad to capture still and moving images.</p> <p>Collect information, e.g., by taking photographs or collecting objects.</p>	<p>Understanding the World (Specific Area)</p> <ul style="list-style-type: none"> Technology: children recognise that a range of technology is used in places such as homes and schools. They select and use technology for particular purpose. <p>Use a shortcut such as an icon on the desktop to navigate to a specific website.</p> <p>Explore a teacher-selected website to find a desired page, using hyperlinks and navigation buttons.</p>

	<u>Autumn 1</u>	<u>Autumn 2</u>	<u>Spring 1</u>	<u>Spring 2</u>	<u>Summer 1</u>	<u>Summer 2</u>
Year 1	<u>Technology around us.</u>	<u>Creating Media – Digital Painting</u>	<u>Creating media – Digital writing</u>	<u>Grouping data</u>	<u>Programming A – Moving a robot</u>	<u>Programming B – Programming animations</u>
NC Strand:	<ul style="list-style-type: none"> Recognise common uses of information technology beyond school (DL) Use technology purposefully to create, organise, store, manipulate, and retrieve digital content (IT) 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. (ES) 	<ul style="list-style-type: none"> Use technology purposefully to create, organise, store, manipulate, and retrieve digital content (IT) 	<ul style="list-style-type: none"> Use technology purposefully to create, organise, store, manipulate, and retrieve digital content (IT) Use technology safely and respectfully, keeping personal information private (ES) 	<ul style="list-style-type: none"> Use technology purposefully to create, organise, store, manipulate, and retrieve digital content (IT) Use technology safely and respectfully (ES) 	<ul style="list-style-type: none"> Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions (CS) Create and debug simple programs (CS) Use logical reasoning to predict the behaviour of simple programs (CS) Recognise common uses of information technology beyond school (CS) 	<ul style="list-style-type: none"> Understand what algorithms are, how they are implemented as programs on digital devices, and that programs execute by following precise and unambiguous instructions (CS) Create and debug simple programs (CS) Use logical reasoning to predict the behaviour of simple programs (CS)

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Year 2	<u>Information technology around us.</u>	<u>Creating Media – Digital Painting</u>	<u>Creating media – Digital writing</u>	<u>Grouping data</u>	<u>Programming A – Moving a robot</u>	<u>Programming B – Programming animations</u>
NC Strand:	<ul style="list-style-type: none"> Recognise common uses of information technology beyond school (DL) Use technology purposefully to create, organise, store, manipulate, and retrieve digital content (IT) 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. (ES) 	<ul style="list-style-type: none"> Use technology purposefully to create, organise, store, manipulate, and retrieve digital content (IT) 	<ul style="list-style-type: none"> Use technology purposefully to create, organise, store, manipulate, and retrieve digital content (IT) Use technology safely and respectfully, keeping personal information private (ES) 	<ul style="list-style-type: none"> Use technology purposefully to create, organise, store, manipulate, and retrieve digital content (IT) Use technology safely and respectfully (ES) 	<ul style="list-style-type: none"> Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions (CS) Create and debug simple programs (CS) Use logical reasoning to predict the behaviour of simple programs (CS) Recognise common uses of information technology beyond school (CS) 	<ul style="list-style-type: none"> Understand what algorithms are, how they are implemented as programs on digital devices, and that programs execute by following precise and unambiguous instructions (CS) Create and debug simple programs (CS) Use logical reasoning to predict the behaviour of simple programs (CS)

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Year 3	<u>Connecting computers</u>	<u>Stop-frame animation</u>	<u>Creating media – Desktop publishing</u>	<u>Data and information – Branching databases</u>	<u>Programming A – Sequence in music</u>	<u>Programming B – Events and actions</u>
NC Strand:	<ul style="list-style-type: none"> Use sequence, selection, and repetition in programs; work with variables and various forms of input and output (CS) 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 (IT) 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 (DL) 	<ul style="list-style-type: none"> 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 (DL) Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact. (ES) 	<ul style="list-style-type: none"> Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content (ES) 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 (DL) 	<ul style="list-style-type: none"> 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 (DL) Use technology safely, respectfully, and responsibly (ES) 	<ul style="list-style-type: none"> Design, write, and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts (CS) Use sequence, selection, and repetition in programs; work with variables and various forms of input and output (CS) Use logical reasoning to explain how some simple algorithms work, and to detect and correct errors in algorithms and programs (CS) 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 (DL) 	<ul style="list-style-type: none"> Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts (CS) Use sequence, selection, and repetition in programs; work with variables and various forms of input and output (CS) Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs (CS) 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 (DL)

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Year 4	<u>Computing systems and networks – The Internet</u>	<u>Creating media – Audio editing</u>	<u>Creating media – Photo editing</u>	<u>Data and information – Data logging</u>	<u>Programming A – Repetition in shapes</u>	<u>Programming B – Repetition in games</u>
NC Strand:	<ul style="list-style-type: none"> 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 (IT) Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content (ES) 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 (DL) Use technology safely, respectfully, and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact. (ES) 	<ul style="list-style-type: none"> Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content (ES) 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 (DL) Use technology safely, respectfully, and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact (ES) 	<ul style="list-style-type: none"> Use search technologies effectively (ES) 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 (DL) Use technology safely, respectfully and responsibly; recognise acceptable /unacceptable behaviour; identify a range of ways to report concerns about content and contact. (ES) 	<ul style="list-style-type: none"> To work with various forms of input (CS) 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 (DL) 	<ul style="list-style-type: none"> Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts (CS) Use sequence, selection, and repetition in programs; work with variables and various forms of input and output (CS) Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs (CS) 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 (DL) 	<ul style="list-style-type: none"> Design, write, and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts (CS) Use sequence, selection, and repetition in programs; work with variables and various forms of input and output (CS) Use logical reasoning to explain how some simple algorithms work, and to detect and correct errors in algorithms and programs (CS) 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 (DL)

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Year 5	<u>Computing systems and networks – Sharing information</u>	<u>Creating Media - Vector drawing</u>	<u>Creating media – Video editing</u>	<u>Data and information – Flat-file databases</u>	<u>Programming A – Selection in physical computing</u>	<u>Programming B – Selection in quizzes</u>
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Year 6	<u>Computing systems and networks – Communication</u>	<u>Creating Media – 3D Modelling</u>	<u>Creating Media -Web page creation</u>	<u>Data and Information – Spreadsheets</u>	<u>Programming A – Variables in games</u>	<u>Programming B – Sensing</u>
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Subject intent: To equip children with the computational skills, knowledge and understanding in order for them to be responsible, confident, creative and competent digital citizens.