

Computing Curriculum Overview

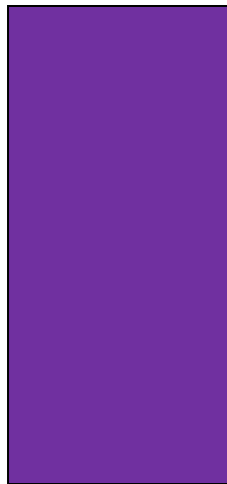


Year	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Key skills	Children recognise that a range of technology is used in places such as homes and schools. They select and use technology for particular purposes.					
Nursery	<p>Understanding the world: technology. Seeks to acquire basic skills in turning on and operating some ICT equipment. •Operates mechanical toys, e.g. turns the knob on a wind-up toy or pulls back on a friction car. (22-36) Knows how to operate simple equipment, e.g. turns on CD player and uses remote control. •Shows an interest in technological toys with knobs or pulleys, or real objects such as cameras or mobile phones. •Shows skill in making toys work by pressing parts or lifting flaps to achieve effects such as sound, movements or new images. •Knows that information can be retrieved from computers (30-50)</p>	<p>Understanding the world: technology. Seeks to acquire basic skills in turning on and operating some ICT equipment. •Operates mechanical toys, e.g. turns the knob on a wind-up toy or pulls back on a friction car. (22-36) Knows how to operate simple equipment, e.g. turns on CD player and uses remote control. •Shows an interest in technological toys with knobs or pulleys, or real objects such as cameras or mobile phones. •Shows skill in making toys work by pressing parts or lifting flaps to achieve effects such as sound, movements or new images. •Knows that information can be retrieved from computers (30-50)</p>	<p>Understanding the world: technology. Seeks to acquire basic skills in turning on and operating some ICT equipment. •Operates mechanical toys, e.g. turns the knob on a wind-up toy or pulls back on a friction car. (22-36) Knows how to operate simple equipment, e.g. turns on CD player and uses remote control. •Shows an interest in technological toys with knobs or pulleys, or real objects such as cameras or mobile phones. •Shows skill in making toys work by pressing parts or lifting flaps to achieve effects such as sound, movements or new images. •Knows that information can be retrieved from computers (30-50)</p>	<p>Understanding the world: technology. Seeks to acquire basic skills in turning on and operating some ICT equipment. •Operates mechanical toys, e.g. turns the knob on a wind-up toy or pulls back on a friction car. (22-36) Knows how to operate simple equipment, e.g. turns on CD player and uses remote control. •Shows an interest in technological toys with knobs or pulleys, or real objects such as cameras or mobile phones. •Shows skill in making toys work by pressing parts or lifting flaps to achieve effects such as sound, movements or new images. •Knows that information can be retrieved from computers (30-50)</p>	<p>Understanding the world: technology. Seeks to acquire basic skills in turning on and operating some ICT equipment. •Operates mechanical toys, e.g. turns the knob on a wind-up toy or pulls back on a friction car. (22-36) Knows how to operate simple equipment, e.g. turns on CD player and uses remote control. •Shows an interest in technological toys with knobs or pulleys, or real objects such as cameras or mobile phones. •Shows skill in making toys work by pressing parts or lifting flaps to achieve effects such as sound, movements or new images. •Knows that information can be retrieved from computers (30-50)</p>	<p>Understanding the world: technology. Seeks to acquire basic skills in turning on and operating some ICT equipment. •Operates mechanical toys, e.g. turns the knob on a wind-up toy or pulls back on a friction car. (22-36) Knows how to operate simple equipment, e.g. turns on CD player and uses remote control. •Shows an interest in technological toys with knobs or pulleys, or real objects such as cameras or mobile phones. •Shows skill in making toys work by pressing parts or lifting flaps to achieve effects such as sound, movements or new images. •Knows that information can be retrieved from computers (30-50)</p>
Reception	<p>Understanding the world: technology. Completes a simple program on a computer. •Uses ICT hardware to interact with age-appropriate computer software. (40-60) Early Learning Goal 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>Understanding the world: technology. Completes a simple program on a computer. •Uses ICT hardware to interact with age-appropriate computer software. (40-60) Early Learning Goal 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>Understanding the world: technology. Completes a simple program on a computer. •Uses ICT hardware to interact with age-appropriate computer software. (40-60) Early Learning Goal 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>Understanding the world: technology. Completes a simple program on a computer. •Uses ICT hardware to interact with age-appropriate computer software. (40-60) Early Learning Goal 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>Understanding the world: technology. Completes a simple program on a computer. •Uses ICT hardware to interact with age-appropriate computer software. (40-60) Early Learning Goal 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>Understanding the world: technology. Completes a simple program on a computer. •Uses ICT hardware to interact with age-appropriate computer software. (40-60) Early Learning Goal 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>
Key skills	<p>Pupils should be taught to:</p> <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 • 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 					
Year 1	<p>Online safety and exploring purple mash DL Use technology safely and respectfully, keeping personal</p>	<p>Pictograms IT Use technology purposefully to create, organise, store,</p>	<p>Maze Explorers. CS Understand what algorithms are; how they are implemented as programs on</p>	<p>Animated Story Books. IT Use technology purposefully to create, organise, store,</p>	<p>Coding. CS Understand what algorithms are; how they are implemented as programs on</p>	<p>Spreadsheets. IT Use technology purposefully to create, organise, store, manipulate and retrieve digital content</p>

	<p>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> <p>Grouping & Sorting IT Use technology purposefully to create, organise, store, manipulate and retrieve digital content</p>	<p>manipulate and retrieve digital content</p> <p>Lego Builders CS Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions</p>	<p>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.</p>	<p>manipulate and retrieve digital content</p>	<p>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</p>	<p>Technology outside school. DL Recognise common uses of information technology beyond school</p>
Year 2	<p>Coding CS 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.</p>	<p>Online Safety DL 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> <p>Spreadsheets IT Use technology purposefully to create, organise, store, manipulate and retrieve digital content</p>	<p>Questioning IT Use technology purposefully to create, organise, store, manipulate and retrieve digital content</p> <p>Effective Searching IT Use technology purposefully to create, organise, store, manipulate and retrieve digital content Recognise common uses of information technology beyond school</p>	<p>Creating Pictures IT Use technology purposefully to create, organise, store, manipulate and retrieve digital content</p>	<p>Making Music IT Use technology purposefully to create, organise, store, manipulate and retrieve digital content</p>	<p>Presenting Ideas IT Use technology purposefully to create, organise, store, manipulate and retrieve digital content</p>
Key skills	<p>Pupils should be taught to:</p> <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 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 					
Year 3	<p>Coding CS 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.</p>	<p>Online Safety DL Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.</p> <p>Spreadsheets IT</p>	<p>Touch Typing 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</p>	<p>Email CS IT DL 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.</p>	<p>Branching Databases 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,</p>	<p>Simulations 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.</p>

	Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs	Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content	presenting data and information.	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.	evaluating and presenting data and information.	Graphing 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.
Year 4	Coding CS IT 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 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. IT	Online Safety DL IT Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact. 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. Spreadsheets IT Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content	Writing for different purposes 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.	Logo CS 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	Animation 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. Effective Searching CS IT 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.	Hardware Investigators 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. Making Music IT Use technology purposefully to create, organise, store, manipulate and retrieve digital content
Year 5	Coding CS IT 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.	Spreadsheets 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.	.Databases 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.	Game Creator IT 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. Design, write and debug programs that accomplish specific goals, including controlling or simulating	3D Modelling 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	Concept Maps 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.

	<p>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. IT</p> <p>Online Safety DL CS Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact. 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.</p>			<p>physical systems; solve problems by decomposing them into smaller parts. CS</p>		
Year 6	<p>Coding CS IT 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. 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. IT</p> <p>Online Safety DL IT 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</p>	<p>Spreadsheets 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.</p>	<p>Blogging CS IT DL 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 technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact 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.</p>	<p>Text Adventures CS IT 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. 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. IT</p>	<p>Networks 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.</p>	<p>Quizzing 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.</p>

	communication and collaboration. CS Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content. IT Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact DL					
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DL - Digital Literacy

IT - Information Technology

CS - Computer Science