



Early Years and Key Stage 1

	Early Years	Year 1	Year 2	End of Key Stage Expectations
Information Technology	<p>30-50mth: Knows that information can be retrieved from computers.</p> <p>40-60mth: Completes a simple program on a computer. Interacts with age-appropriate computer software.</p> <p>ELG: 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>I can use a mouse, finger etc to select & move items on the screen, assembling or matching objects Cyberwalk (Autumn); Robot Words (Autumn)</p> <p>Can take a digital picture or video clip, or record a sound, as part of a task. I can sort objects Design a plate (Summer)</p> <p>Can use some software to create / assemble digital content for clear purpose, (could be text, images, animation, graph, sound, etc.) Sharing my Iceberg work (Autumn); Robot Words (Autumn); Cyberwalk (Autumn); I can sort objects (Spring); Design a plate (Summer)</p> <p>Can make straight-forward edits of their digital work (text, image, sound etc.,) using simple editing tools, to both correct or improve it. Design a plate (Summer)</p> <p>Can access a resource and then find answers to straight-forward questions. I can sort objects (Spring)</p> <p>Can recognise and talk about some common uses of IT in the world around them. Giving instructions to make toast (Summer)</p> <p>Can save and retrieve some work (and print if appropriate to task). All</p>	<p>Can use some software to create / assemble digital content for clear purpose, (could be text, images, animation, graph, sound, etc.) Do you like my blog? (Autumn); Say no to graffiti! (Spring); Digiduck's dilemma (Spring)</p> <p>Can make straight-forward edits of their digital work (text, image, sound etc.,) using simple editing tools, to both correct or improve it. Say no to graffiti! (Spring)</p> <p>Can navigate their way within some straight-forward digital content, such as selected history content, to find some specific information. Minibeasties (Spring)</p> <p>Can create and amend a (multi-media) resource for a clear purpose, starting to show a sense of the 'audience'. Say no to graffiti! (Spring)</p> <p>Can create & store some data, (simple data file), and then find answers to straight-forward questions. How do you get to school safely? (Autumn); Minibeasties (Spring)</p> <p>Can recognise and talk about some common uses of ICT in the world around them. How does that work? (Autumn); Let's e mail granma (Autumn)</p> <p>Can save and retrieve work (and print if appropriate to task). Say no to graffiti (Spring); and developed across units</p>	<p>use technology purposefully to create, organise, store, manipulate and retrieve digital content</p> <p>recognise common uses of information technology beyond school</p>
Computer Science		<p>Can give simple instructions to control a device, like a 'floor' robot, or on-screen object. What is an algorithm? (Spring); I can code (Summer)</p> <p>Can use trial and error to produce an accurate set of simple instructions, to control a floor 'robot' or on-screen object. Fly and dig carefully (Spring); What's an algorithm? (Spring); Giving instructions to make toast (Summer); I can code (Summer)</p> <p>Can name some digital devices that need precise instructions (algorithms) to work / be controlled. What's an algorithm? (Spring); Giving instructions to make toast (Summer)</p> <p>Understands that software may represent a fantasy situation and can make sensible (logical) decisions/choices when 'playing' a straight-forward 'game'. Fly and dig carefully (Spring); I can code (Spring); Design a plate (Summer)</p> <p>Understands some basic computing terms and concepts, such as ... algorithm, program, sequence, etc. What is an algorithm? (Spring)</p>	<p>Can give a set of simple instructions to program (control) a device, like a 'floor' robot, or on-screen object. How do you get to school safely? (Autumn); Demolition robot (Autumn); What's wrong with this game? (Spring); I can debug! (Summer)</p> <p>Can use trial and error to produce an accurate set of 'instructions' to control a floor 'robot' or on-screen object; refine (de-bug) and improve / make changes. Demolition robot (Autumn); I can debug! (Summer); Instructions and recipes (Summer)</p> <p>Can talk about some electronic devices and understands that they need precise instructions (algorithms) to work / be programmed (controlled). How does that work? (Autumn)</p> <p>Demonstrates logical 'trial and error' when using a computer simulation or game, and predicts the consequences of decisions/choices made. How does that work? (Autumn); What's wrong with this game? (Spring); I can debug! (Summer)</p> <p>Understands some basic computing terms and concepts, such as: (school) network, algorithm, program, debug, editing, website, etc. Words, words, words (Summer); Demolition robot (Autumn); Instructions and recipes (Summer); How does that work? (Autumn); Instructions and recipes (Summer)</p>	<p>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>create and debug simple programs</p> <p>use logical reasoning to predict the behaviour of simple programs</p>
Digital Literacy		<p>Knows about the Internet and beginning to understand some key, age appropriate, safety 'rules'. Sharing my iceberg work (Autumn); Smartie the penguin (Autumn); How does my garden grow? (Autumn); Internet scenario card</p> <p>Can share some information with others, (such as via school network, in school MLE, via a 'closed' blog). Sharing my iceberg work (Autumn)</p> <p>Can find some straight-forward information from a 'safe', selected online resource. How does my garden grow? (Autumn)</p>	<p>Can talk about key online safety 'rules' and knows where to go / report if a problem. Digiducks dilemma (Spring); Internet scenario card activity (Spring); Finding Out about...(Mary Secole) (Summer); Follow that Footprint (Summer)</p> <p>Can create and share some information online, (such as in school MLE, 'closed' email system or blog), understanding need to be respectful and safe. Do you like my blog? (Autumn); Let's e mail granma (Autumn); Minibeasties (Spring)</p> <p>Can find some straight-forward information from (selected) website resource(s) and knows not all websites 'good to use'. Finding Out about ... (Mary Seacole) (Summer)</p>	<p>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>



Key Stage 2

	Year 3	Year 4	Year 5	Year 6	End of Key Stage Expectations
Information Technology	<p>Can use some software to create / assemble digital content for clear purpose, (could be text, images, animation, graph, sound, etc.) Journey of an email (Autumn); Safe searching with Dongle (Autumn); I can make my own game (Spring); I can make an animation (Spring); Creating a tessellation (Spring); See and hear my mix (Summer); Do you like my presentation? (Summer); Finding out about keeping healthy (Summer)</p> <p>Can make straight-forward edits of their digital work (text, image, sound etc.,) using simple editing tools, to both correct and improve it. I can make an animation (Spring); Creating a tessellation (Spring); See and hear my mix (Summer)</p> <p>Can create and amend a (multi-media) resource that shows a sense of 'audience'. See and hear my mix (Summer)</p> <p>Can navigate their way within some straight-forward digital content, such as selected history content, to find some specific information. Would I lie to you? (Spring); Finding out about healthy habits (Summer)</p> <p>Can create & store some data, (simple data file), and then find answers to straight-forward questions. Finding out about healthy habits (Summer)</p> <p>Can recognise and talk about some common uses of ICT in the world around them. Finding out about healthy habits (Summer); Words words words (Summer); and developed across units</p> <p>Can save and retrieve work from electronic folders (and print if appropriate to task). Safe searching with Dongle (Autumn); See and hear my mix (Summer)</p>	<p>Can use software to create and combine content (be it text, pictures/ Images, graphs, animation, podcast etc.,) for meaningful purpose(s). Internet search and presentation (Autumn); Let's email (Autumn); What's a spreadsheet? (Autumn); Creating an alien landscape (Spring); I can rap! (Summer)</p> <p>Can also edit and amend their digital work (text, image, sound etc.,) using simple editing tools, to both correct and improve it. Internet search and presentation (Autumn); My exciting world landmarks (Spring); Creating an alien landscape (Spring); I can rap! (Summer)</p> <p>Can create and amend a multi-media resource that shows a sense of 'audience'. Internet search and presentation (Autumn); My exciting world landmarks! (Spring); I can rap! (Summer)</p> <p>Can navigate their way within range of (selected) online content, to find specific information. Weather data (Spring); My exciting world landmarks! (Spring)</p> <p>Can include some information / content from an online resource within a 'presentation'. Internet search and presentation (Autumn); My exciting world landmarks! (Spring)</p> <p>Can use a data file to find answers to straight-forward questions, (such as through data logging or a survey or a prepared database or a simple spreadsheet, etc). What's a spreadsheet? (Autumn) Weather data (Spring)</p> <p>Can save and retrieve work from electronic folders (and print if appropriate to task). Internet search and presentation (Autumn); I can rap! (Summer); developed across units</p>	<p>Can use software effectively to create, design and manipulate for purposeful outcomes, such as DT, art or music projects. Building a sustainable house (Autumn); Simply delicious (Autumn); I can make an animation 2 (Spring); Can you finish my story? (Summer)</p> <p>Can combine resources from different sources into a digital presentation, showing clear sense of intended purpose and 'audience'. Design a poster (Autumn);</p> <p>Can find specific and valid information (i.e. be discerning) using sensible key words / search terms, from (selected) online web content, as fits the task. Stop! Check! (Autumn);Searching searching (Spring)</p> <p>Can (collect), analyse and draw conclusions from data, (such as through data logging or a survey or a prepared database or through manipulating a spreadsheet, etc). Simply delicious (Autumn)</p> <p>Can save and retrieve work from various electronic folders on network (and controlled online environments where relevant). developed across all units</p>	<p>Can use software effectively to create, design and manipulate for purposeful outcomes, such as DT, art or music projects. Simulating environments (Autumn); Do you agree? (Spring); Party time (Summer)</p> <p>Can combine resources from different sources into a digital presentation, evaluate it, and show clearly intended purpose and 'audience' Do you agree? (Spring)</p> <p>Can be discerning and find valid information using sensible key words search terms, from a range of online web content, as fits the task. How can we trust the Internet? (Spring)</p> <p>Can (collect), analyse, evaluate and draw conclusions from data, such as through survey, database or spreadsheet, etc. Party time (Summer)</p> <p>Can save and retrieve work from various electronic folders on network (and controlled online environments where relevant). developed across all units</p>	<p>use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content</p> <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</p>
Computer Science	<p>Demonstrates logical 'trial and error' when using a computer simulation, 'model' or game, and predicts some consequences of decisions/choices made. Can your robot make shapes (Autumn); Create a duck and fly it! (Spring); I can make my own game (Spring)</p> <p>Can produce an accurate set of simple instructions (code), to program (control) an on-screen object (or floor 'robot'), using trial and error to refine (de-bug). Can your robot make shapes? (Autumn); I can make my own game (Spring)</p> <p>Can also talk about how the sequence of events in some simple instructions (algorithms) or code are 'working'. Can your robot make shapes? (Autumn); I can make my own game (Spring); I can use block coding (Summer); How does that work? (Summer)</p> <p>Can talk about some digital devices beyond school, that need precise instructions (algorithms) to work / be programmed (controlled). Journey of an email (Autumn); How does that work? (Summer)</p>	<p>Demonstrates logical choices and prediction when using a computer simulation, 'model' or game and can make simple edits to solve a problem. Apple hunt (Autumn); I can create a game using j2code (Summer); Creating a Game in 2DIY (Summer)</p> <p>Can produce, debug and edit an accurate sequence of instructions, include use of repeat, to control on-screen objects. Apple hunt (Autumn); Logo turtle mania (Spring); I can create a game using j2code (Summer); Creating a Game in 2DIY (Summer)</p> <p>Can plan and create a program using decomposition; includes the use of selection (IF/ELSE) and/or variables. Logo turtle mania (Spring); I can create a game using j2code (Summer); Creating a Game in 2DIY (Summer)</p> <p>Can talk about different types of input options e.g. motion /touch, microphone, data logging sensor; and output options e.g. switch, speakers, screen, etc. Weather data (Spring)</p>	<p>Can 'test', amend / edit a simple computer 'game' or model or simulation to solve a problem. Building a sustainable house (Autumn); Simply delicious (Autumn); Logo Block of flats (Spring); Starting with Scratch (Summer);</p> <p>Can create an accurate program to accomplish a given goal, including the use of repetition (loops), selection (IF/ELSE) and variables. Logo Block of flats (Spring);Starting with Scratch (Summer)</p> <p>Can use logical reasoning to deconstruct programs, evaluate their effectiveness and make them more challenging and / or 'elegant' / efficient. Logo Block of flats (Spring); Starting with Scratch (Summer)</p> <p>Can use different types of input options and output options such as through sensing and control 'kits' and/or software, to solve a problem. Logo Block of flats (Spring); Starting with Scratch (Summer)</p>	<p>Can test, debug and edit a program that accomplishes a given goal, (simple computer 'game' or model or simulation), to solve a problem. Simulating environments (Autumn); Fun with Scratch (Autumn); Party time (Summer); Logo Patterns (Summer)</p> <p>Can create & develop programs, by planning, debugging and applying programming skills of repetition (loops), selection (IF/ELSE) and variables, to accomplish specific goals. Simulating environments (Autumn); Fun with scratch (Autumn); Logo patterns (Summer);</p> <p>Can use logical reasoning to deconstruct programs, evaluate their effectiveness and make them more challenging and / or 'elegant' / efficient. Fun with scratch (Autumn); Simulating environments (Autumn); Logo patterns (Summer)</p> <p>Can use different types of input options and output options such as through sensing and control 'kits' and/or software to solve a problem. Simulating environments (Autumn); Fun with scratch (Autumn);</p>	<p>design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts</p> <p>use sequence, selection, and repetition in programs; work with variables and various forms of input and output</p> <p>use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs</p> <p>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>



	Knows some relevant computing terms such as computer network, Internet, algorithm, program, World Wide Web, website, etc. Journey of an email (Autumn); Words words words (Summer); How does that work? (Summer);	Developing and using a wider computing 'vocabulary' relevant to work, such as de-bug, Apps, data logging, search engine, spam, Wiki, etc. Words words words (Spring); Logo Turtle Mania (Spring); I can create a game with j2code (Summer); and developed across all units	Has an understanding of computer networks (local, internet services and WWW). Searching searching (Spring) Developing and using a wider computing 'vocabulary' in context of task, such as search engine, URL, variable, validate, digital footprint, spam, Wiki, etc. Searching, searching (Spring); Starting with Scratch (Summer); Words words words (Summer) and developed across all units	Logo patterns (Summer) Has an understanding of computer networks (local, internet services and WWW). What is the Internet? (Autumn); How can we trust the Internet (Spring) Developing and using a wider computing 'vocabulary' in context of task, such as search engine, URL, HTML, https, variable, validate, digital footprint, etc.. Words words words (Autumn); What is the Internet? (Autumn)	
Digital Literacy	<p>Can talk about key online safety 'rules' and knows where to go / report if a problem. Safe searching with Dongle (Autumn); Journey of an email (Autumn); I can make my own game (Spring)</p> <p>Can create and share some information online (such as in school MLE, email/blog), understanding need to be respectful and safe. Do you like my presentation? (Summer); Internet Scenario card (Autumn); Journey of an email (Autumn);</p> <p>Can find some straight-forward information from (selected) website resource(s) and knows not all websites 'good to use'. Would I lie to you? (Spring)</p>	<p>Can talk about key online safety 'rules', knows what may be unacceptable behaviour, and knows where to go / report if a problem. Apple hunt (Autumn); Internet scenario card activity (Autumn); Let's email (Autumn)</p> <p>Can create and share some information online (such as school MLE, email / blog), demonstrating need to be respectful and safe. Internet search and presentation (Autumn); Let's email (Autumn)</p> <p>Can find straight-forward information from (selected) website resource(s) and knows sites can contain, true or false facts, or opinion. Internet search and presentation (Autumn); My exciting world landmarks! (Spring)</p>	<p>Can talk about key online safety 'rules', knows what may be unacceptable behaviour, and knows where to go / report if a problem. Internet scenario card activity (Autumn); Design a poster (Autumn); Tell me a joke (Spring)</p> <p>Can demonstrate 'web-savvy' awareness, from a range of given scenarios, including conduct, contact and content 'risks' and issues. Stop! Check! (Autumn); Internet scenario card activity (Autumn); Searching, searching (Spring); I can make an animation 2 (Spring)</p> <p>Can communicate and collaborate online (such as in MLE blog/Wiki /forum), demonstrating respectful and safe behaviours. Can you finish my story? (Summer); Tell me a joke (Summer)</p> <p>Understands some simple steps to 'validate' information found on the Web, such as clarity of search term, URL, links to and from, etc. Stop! Check! (Autumn); Searching, searching (Spring)</p>	<p>Can demonstrate 'web-savvy' awareness, from a range of given scenarios, including commercial, contact and content 'risks' and issues. What is the Internet? (Autumn); How can we trust the Internet? (Spring); Internet scenario card activity (Spring); How fake is that? (Summer)</p> <p>Can discuss range of eSafety and eSecurity (privacy) issues and knows range of ways to report concerns or inappropriate behaviour. How can we trust the Internet? (Spring); Internet scenario card activity (Spring); How fake is that? (Summer)</p> <p>Can communicate and collaborate online (such as in MLE blog/Wiki /forum), demonstrating respectful and safe behaviours. Do you agree? (Spring); How can we trust the Internet (Spring); How fake is that? (Summer)</p> <p>Can check the results of their WWW searches i.e. how useful, relevant, reasonable, valid and accurate the information is. How can we trust the Internet? (Spring); How fake is that? (Summer)</p>	use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.