



Computing

Early Years and Key Stage 1

	EYFS: Nursery	EYFS: Reception	Year 1	Year 2	End of Key Stage Expectations
Information Technology	Through weekly planned Computing/Technology Activities: I can show interest in technological toys Shows skill in making toys work by pressing parts or lifting flaps to achieve effects (Autumn) Knows how to operate simple equipment, I can show interest in real objects such as cameras or mobile phones. (Spring) I can understand that information can be retrieved from computers. (Summer)	Through weekly planned Computing/Technology Activities: I can complete a simple program on a computer. I can interact with age-appropriate computer software. (Autumn) I can recognise that a range of technology is used in places such as homes and schools. I can select and use technology for particular purposes. (Spring) I am beginning to find out about and use a range of everyday technology. I am beginning to select appropriate applications that support an identified need (Summer)	I I can use a mouse, finger etc to select & move items on the screen, assembling or matching objects Cyberwalk (Autumn); Robot Words (Autumn) I can take a digital picture or video clip, or record a sound, as part of a task. I I can sort objects Design a plate (Summer) I 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 I can sort objects (Spring); Design a plate (Summer) I 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) I can access a resource and then find answers to straight-forward questions. I I can sort objects (Spring) I can recognise and talk about some common uses of IT in the world around them. Giving instructions to make toast (Summer) I can save and retrieve some work (and print if appropriate to task). All	I 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) I 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) I can navigate their way within some straight-forward digital content, such as selected history content, to find some specific information. Minibeasties (Spring) I 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) I 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) I 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) I can save and retrieve work (and print if appropriate to task). Say no to graffiti (Spring); and developed across units	use technology purposefully to create, organise, store, manipulate and retrieve digital content recognise common uses of information technology beyond school
Computer Science			I can give simple instructions to control a device, like a 'floor' robot, or on-screen object. What is an algorithm? (Spring); I I can code (Summer) I 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) I 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) Understands that software may represent a fantasy situation and I can make sensible (logical) decisions/choices when 'playing' a straight-forward 'game'. Fly and dig carefully (Spring); I I can code (Spring); Design a plate (Summer) Understands some basic computing terms and concepts, such as ... algorithm, program, sequence, etc. What is an algorithm? (Spring)	I 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 I can debug! (Summer) I 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 I can debug! (Summer); Instructions and recipes (Summer) I can talk about some electronic devices and understands that they need precise instructions (algorithms) to work / be programmed (controlled). How does that work? (Autumn) 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 I can debug! (Summer) 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)	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
Digital Literacy			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 I can share some information with others, (such as via school network, in school MLE, via a 'closed' blog). Sharing my iceberg work (Autumn) I can find some straight-forward information from a 'safe', selected online resource. How does my garden grow? (Autumn)	I 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) I 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) I 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)	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.



Computing

Key Stage 2

	Year 3	Year 4	Year 5	Year 6	End of Key Stage Expectations
Information Technology	I 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 I can make my own game (Spring); I 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) I can make straight-forward edits of their digital work (text, image, sound etc.,) using simple editing tools, to both correct and improve it. I I can make an animation (Spring); Creating a tessellation (Spring); See and hear my mix (Summer) I can create and amend a (multi-media) resource that shows a sense of 'audience'. See and hear my mix (Summer) I 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) I can create & store some data, (simple data file), and then find answers to straight-forward questions. Finding out about healthy habits (Summer) I 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 I 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)	I 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 I can rap! (Summer) I 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 I can rap! (Summer) I 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 I can rap! (Summer) I can navigate their way within range of (selected) online content, to find specific information. Weather data (Spring); My exciting world landmarks! (Spring) I can include some information / content from an online resource within a 'presentation'. Internet search and presentation (Autumn); My exciting world landmarks! (Spring) I 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) I can save and retrieve work from electronic folders (and print if appropriate to task). Internet search and presentation (Autumn); I I can rap! (Summer); developed across units	I 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 I can make an animation 2 (Spring); I can you finish my story? (Summer) I can combine resources from different sources into a digital presentation, showing clear sense of intended purpose and 'audience'. Design a poster (Autumn); I 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. Searching searching (Autumn) ;Stop! Check! (Spring) I 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) I can save and retrieve work from various electronic folders on network (and controlled online environments where relevant). developed across all units	I 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) I can combine resources from different sources into a digital presentation, evaluate it, and show clearly intended purpose and 'audience' Do you agree? (Spring) I 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) I can (collect), analyse, evaluate and draw conclusions from data, such as through survey, database or spreadsheet, etc. Party time (Summer) I can save and retrieve work from various electronic folders on network (and controlled online environments where relevant). developed across all units	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
Computer Science	Demonstrates logical 'trial and error' when using a computer simulation, 'model' or game, and predicts some consequences of decisions/choices made. I can your robot made shapes (Autumn); Create a duck and fly it! (Spring); I I can make my own game (Spring) I 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). I can your robot make shapes? (Autumn); I I can make my own game (Spring) I can also talk about how the sequence of events in some simple instructions (algorithms) or code are 'working'. I can your robot make shapes? (Autumn); I I can make my own game (Spring); I I can use block coding (Summer); How does that work? (Summer) I 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) I know some relevant computing terms such as computer network, Internet, algorithm, program, World Wide Web, website, etc. Journey of an email	Demonstrates logical choices and prediction when using a computer simulation, 'model' or game and I can make simple edits to solve a problem. Apple hunt (Autumn); I I can create a game using j2code (Summer); Creating a Game in 2DIY (Summer) I 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 I can create a game using j2code (Summer); Creating a Game in 2DIY (Summer) I can plan and create a program using decomposition; includes the use of selection (IF/ELSE) and/or variables. Logo turtle mania (Spring); I I can create a game using j2code (Summer); Creating a Game in 2DIY (Summer) I 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) I can develop and use 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 '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); I 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) I 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) I 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) I have an understanding of computer networks (local, internet services and WWW). Searching searching (Autumn) I can develop and use a wider computing 'vocabulary'	I 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) I 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); I 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) I 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); Logo patterns (Summer) I have an understanding of computer networks (local, internet services and WWW).	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 I can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration



	(Autumn); Words words words (Summer); How does that work? (Summer);	I can create a game with j2code (Summer); and developed across all units	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	What is the Internet? (Autumn); How I can we trust the Internet (Spring) I can develop and use 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	I 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 I can make my own game (Spring) I 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); I 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)	I 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) I 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) I can find straight-forward information from (selected) website resource(s) and knows sites I can contain, true or false facts, or opinion. Internet search and presentation (Autumn); My exciting world landmarks! (Spring)	I 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) I 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 I can make an animation 2 (Spring) I can communicate and collaborate online (such as in MLE blog/Wiki /forum), demonstrating respectful and safe behaviours. I can you finish my story? (Summer); Tell me a joke (Summer) I can understand some simple steps to 'validate' information found on the Web, such as clarity of search term, URL, links to and from, etc. Stop! Check! (Spring); Searching, searching (Spring)	I 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 I can we trust the Internet? (Spring); Internet scenario card activity (Spring); How fake is that? (Summer) I can discuss range of eSafety and eSecurity (privacy) issues and knows range of ways to report concerns or inappropriate behaviour. How I can we trust the Internet? (Spring); Internet scenario card activity (Spring); How fake is that? (Summer) I can communicate and collaborate online (such as in MLE blog/Wiki /forum), demonstrating respectful and safe behaviours. Do you agree? (Spring); How I can we trust the Internet (Spring); How fake is that? (Summer) I 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)	use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.