Information Technology

	COMPUTER SYSTEMS AND NETWORKS						
	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
National Curriculum		**Information Technology – Software** Use technology purposefully to create, organise, store, manipulate and retrieve digital content **Information Technology – Uses** Recognise common uses of information technology beyond school **Online Safety** 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.		**Information Technology – Software** 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 **Information Technology – Uses** 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. **Information Technology – Searching (Year 4 and 6)** Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content. **Know** **Online Safety (Year 4-6)loggin** Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts.		

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Skills	**Range 6:** • I can complete a simple program on electronic devices • I can create content such as a video recording, stories, and/or draw a picture on screen • I can develop digital literacy skills by being able to access, understand and interact with a range of technologies • I can use the internet with adult supervision to find and retrieve information of interest to them	**Technology Around Us** I can choose a piece of technology to do a job I can recognize that some technology can be used in different ways I can identify the main parts of a computer I can use a mouse in different ways I can use a keyboard to type I can use the keyboard to edit text	**IT Around Us** I can describe some uses of computers I can identify information technology in school Identify information technology beyond school	**Connecting Computers** I can identify input and output devices. I can explain that a computer system accepts an input and processes it to produce an output. I can explain how a computer network can be used to share information. I can explain the role of a switch, server, and wireless access point in a network. I can identify network devices around me. I can explain how networks can be connected to other networks.	**The Internet** I can describe how networks connect to other networks. I can explain how the content of the World Wide Web is created, owned, and shared by people. I can describe the type of content/media that can be added, created, and shared on the World Wide Web. I can evaluate the reliability of content and the consequences of unreliable content.	**Systems and Searching** I can describe the input and output of a search engine I can demonstrate that different search terms produce different results I can evaluate the results of search terms	**Communication** I can outline methods of communicating and collaborating using the internet I can choose methods of internet communication and collaboration for given purposes I can evaluate different methods of online communication and collaboration I can decide what you should and should not share online
Knowledge		I know that technology is something that can help us. I know examples of technology and how it helps us. I know that a computer is an example of technology. I know that choices are made when using technology.	I know that different types of computers are used in school. I know that a computer is a part of information technology. I know the features of information technology. I know how rules for using information technology can help us. I know about uses of technology. I know how information technology benefits us.	I know that a process acts on the inputs. I know that an output is produced by the process. I know how changing the process can affect the output. I know what an input is. I know that a digital device is made up of several parts. I know that computers can be connected to each other.	I know that the World Wide Web comprises of websites and web pages. I know how to access the World Wide Web. I know the need for security on the internet. I know how information can be shared via the World Wide Web. I know the benefits of the World Wide Web.	I know that a system is a set of interconnected parts which work together I know that inputs, processes, and outputs in large IT systems I know that computers can be connected together to form IT systems I know that data can be transferred between IT systems	I know that data is transferred across networks using agreed protocols (methods) I know that connections between computers allow access to shared stored files I know that data is transferred in packets I know computers connected to the internet allow people in different places to work together

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		I know why rules are needed when using technology.	I know that choices are made when using information technology.	I know how computer systems can change the way that we work. I know the benefits of computer networks. I know how devices in a network are connected with one another. I know that a network is made up of a number of components. I know how information is passed through multiple connections.	I know that the global interconnection of networks is the internet. I know that the internet enables us to view the World Wide Web. I know the current limitations of World Wide Web media. I know that the World Wide Web is part of the internet.	I know the role of a particular IT system in their lives I know that search engines are examples of large IT systems I know why search engines create indices, and that they are different for each search engine I know the role of web crawlers in creating an index I know how search results are selected I know that ranking orders search results to make them more useful I know how ranking is determined by rules, and that different search engines use different rules I know why the order of results is important and to whom I know how search engines make money by selling targeted advertising space I know some of the limitations of search engines	I know the opportunities that technology offers for communication and collaboration I know that communicating and collaboration using the internet can be public or private I know which types of media can be shared through the internet
Key Vocabulary		Technology, Computer, mouse, trackpad, keyboard, screen, double-click, typing	Information technology (IT), computer, computer, barcode, scanner/scan	Connection, digital, Digital device, input, network, network cables, network sockets, network switch, non-digital, output, process, program, server, wireless access point	Accurate, adverts, browser, content, download, files, honest, information, internet, links, network security, network switch, ownership, permission, route tracing, router, routing, server, sharing, web address, web page, website, World Wide Web	System, connection, search, search engine, refine, index, web crawler, bot, content creator, selection, ranking	Google, Bing, Yahoo!, Swisscows, Duck Duck Go, optimisation, communication, public, private, one-way, two-way, one-to-one, one-to-many, SMS, email, WhatsApp, blog, You tube, Twitter, BBC Newsround

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Topic / Coverage	Me and My Community Sparkle and Shine Winter Wonderland Puddles and Rainbows Dangerous Dinosaurs Big, Wide, World	Superheroes (Autumn 1)	Wriggles and Crawls (Autumn 1)	(Summer 2)	(Autumn 1)	(Autumn 1)	(Autumn 1)

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	CREATING MEDIA						
	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
National Curriculum		**Information Technology – Software** Use technology purposefully to create, organize, store, manipulate and retrieve digital content **Online Safety (Year 1)** 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. **Information Technology – Uses (Year 2)** Recognise common uses of information technology beyond school		**Information Technology – Software** 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.			
Skills	I can complete a simple program on an electronic device. I can use ICT hardware to interact with computer software. I can create a video recording, story, and/or draw a picture on screen. I can use the internet with adult supervision to find and retrieve information. I can use a range of technologies to develop my digital literacy skills.	**Digital Writing** I can use letter, number, and space keys to enter text into a computer. I can use punctuation and special characters. Select text. I can use the Backspace key to remove text. Position the text cursor in a chosen location. I can choose options to achieve a desired effect. I can change the appearance of text on a computer. I can use Undo.	**Digital Photography** I can press or tap to take a picture. I can hold a device safely and responsibly. I can capture a digital image. I can review photographs taken. I can delete poor quality images. I can focus. I can zoom in and out. I can edit a photo. I can recolour a photo. I can crop a photo.	**Animation** I can plan an animation using a storyboard. I can set up the work area with an awareness of what needs to be captured. I can capture an image. I can use the onion skinning tool to review subject position. I can move a subject between captures. I can review a captured sequence of frames as an animation. I can remove frames to improve an animation. I can add media to enhance animation. I can review a completed project.	**Audio Editing** I can record sound using a computer I can play recorded audio. I can import audio into a project. I can delete a section of audio. I can change the volume of tracks in a project I can consider the results of editing choices made.	**3D Modelling** I can create 3D graphical objects on a computer screen. I can alter the view of the 3D space. I can place a 3D object in a 3D space. I can select an object. I can modify an object. I can reposition objects in three dimensions. I can rotate objects in three dimensions. I can resize an object in three dimensions. I can recognise that blank objects must be used as placeholders to create holes.	**Vector Drawing** I can add an object to a vector drawing. I can delete objects. I can select one object or multiple objects. I can move objects between the layers of a drawing. I can duplicate objects using copy and paste. I can modify objects. I can reposition objects. I can group and ungroup selected objects. I can combine options to achieve a desired effect. I can create a vector drawing for a given purpose.

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						I can select multiple objects. I can recognise the role of scale in design. I can combine objects. I can group objects. I can modify multiple objects. I can duplicate an object. I can delete an object. I can recolour an object. I can use an object as a placeholder.	
Knowledge	**Range 6:** • I know how to complete a simple program on electronic devices • I know how to use ICT hardware to interact with age-appropriate computer software • I know how to create content such as a video recording, stories, and/or draw a picture on screen • I know that digital literacy skills help by being able to access, understand and interact with a range of technologies • I know how to use the internet with adult supervision to find and retrieve	I know that a keyboard is used to enter text into a computer. I know that the Shift key changes the output of a key. I know that text can be changed. I know that text can be edited. I know that the appearance of text can be changed. I know the impact of choices made.	I know that some digital devices can capture images using a camera. I know when to choose a landscape or portrait photograph. I know that people around me can view my screen to see my photos. I know that photos can be saved. I know that photographs can be changed through editing. I know that a photograph is composed by the photographer. I know the features of a good photograph. I know how to choose an image that could be improved by editing. I know that photos can be retrieved, edited, and re-saved. I know that some images are not real/fake. I know how to consider the results of choices I have made.	I know that an animation is made up of a sequence of images. I know that a capturing device needs to be in a fixed position. I know that smaller movements create smoother animation. I know the need for consistency in working. I know the impact of adding other media to an animation. I know that a project must be exported so it can be shared.	I know that sound can be recorded. I know that an input device is needed to record sound I know that output devices are needed to play audio I know that recorded audio can be stored on a computer I know that audio can be edited I know that sound can be represented visually as a waveform I know that audio can be layered so that multiple sounds can be played at the same time.	I know that 3D objects comprise length, width, and height (depth). I know the differences when working in 3D compared with 2D. I know that structures can be broken down into a collection of 3D objects. I know the similarities and differences between real-life 3D and virtual 3D.	I know that a vector drawing comprises separate objects. I know that each object in a drawing is in its own layer. I know the impact of choices made. I know that vector images can be scaled without impact on quality. I know that objects can be modified in groups. I know how alignment and size guides can help create a more consistent drawing.

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	information of interest to them						
Key Vocabulary		Word processor, keyboard, keys, letters, Microsoft Word, Google Docs, Word processor, keyboard, keys, letters, numbers, space, backspace, text cursor, capital letters, toolbar, bold, italic, underline, mouse, cursor, select, font, toolbar, undo, backspace,	Device, camera, photograph, capture, image, digital, Landscape, portrait, horizontal, vertical, field of view, narrow, wide, format, Framing, focal point, subject matter, field of view, format, compose, Natural lighting, artificial lighting, flash, focus, background, foreground, Editing, tools, colour, filter, images, Pixlr, Format, framing, lighting, filter, changed, real	Animation, character, consistency, delete, evaluation, events, flip book, frame, image, import, media, onion skinning, photograph, sequence, setting, Stop-frame animation, transition	Audio, edit, editing, evaluate, export, feedback, file, headphones, input, microphone, mixing, MP3, output, pause, playback, podcast, record, save, selection, sound, speaker, start, stop, time-shift	2D, 3D, 3D object, 3D space, colour, dimensions, duplicate, evaluate, group, hole, improve, lift, modify, placeholder, position, resize, rotate, select, ungroup, view	Align, drawing tools, layers, move, object, paste, reflection, reuse, toolbar, vector, vector drawing
Topic / Coverage	Me and My Community Sparkle and Shine Winter Wonderland Puddles and Rainbows Dangerous Dinosaurs Big, Wide, World	Enchanted Woodland (Spring 2)	The Scented Garden (Summer 1)	(Spring 1)	(Autumn 2)	(Spring 2)	(Spring 1)

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	CREATING MEDIA						
	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
National Curriculum		**Information Technology – Software** Use technology purposefully to create, organize, store, manipulate and retrieve digital content		**Information Technology – Software** 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. **Information Technology – Searching** Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content. **Online Safety (Year 4-6)** Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts.			
Skills	I can complete a simple program on an electronic device. I can use ICT hardware to interact with computer software. I can create a video recording, story, and/or draw a picture on screen. I can use a range of technologies to develop my digital literacy skills. I can use the internet with adult supervision to find and retrieve information.	**Digital Painting** I can use a computer to paint a picture I can digitally make marks on a computer screen I can use the brush tool I can use tools to draw shapes I can use tools to draw lines I can use the un-do button to correct a mistake I can change brush colour I can change brush size I can change fill colour in a shape I can change line size I can change line colour I can use the fill tool to change colours	**Making Music** I can recognise that information on a computer can be stored. I can explain that information on a computer can be saved. I can explain that stored information can be retrieved, edited, and resaved. I can recognise that people around me can view my screen to see my work. I can recognise that my work can be printed and shared. I can recognise that my work can be shared between devices.	**Desktop Publishing** I can show that page orientation can be changed. I can organise text and image placeholders in a page layout. I can add and remove images to and from placeholders. I can review a document I can add text to a placeholder. I can edit text in a placeholder. I can choose fonts and apply effects to text. I can move/resize and rotate images.	**Photo Editing** I can recognise that digital images can be manipulated. I can recognise that images can be changed for different purposes. I can use the most appropriate tool for a particular purpose. I can recognise that not all images are real. I can consider the impact of changes made on the quality of the image. I can change the composition of an image. I can apply a change globally. I can apply changes locally. I can make additions.	**Video Editing** I can review existing video content. I can plan a video production using a storyboard. I can review captured video. I can use a recording device and a computer to make a video. I can hold the device safely in landscape orientation. I can locate the function on the device to record the video. I can press the start/stop button to end the recording.	**Web Page Creation** I can review an existing website (navigation bars, header) I can create a new blank web page. I can add text to a web page. I can set the style of text on a web page. I can embed media in a web page. I can change the appearance of text. I can add web pages to a website. I can insert hyperlinks to another site. I can insert hyperlinks between pages. I can preview a web page (different screen sizes).

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						I can use techniques to create specific effects. I can focus, zoom and compose. I can pan left/right or tilt up or down. I can locate a video captured on a device. I can play back video. I can select and apply effects/delete/crop/split to a section of video.	
Knowledge	**Range 6:** • I know how to complete a simple program on electronic devices • I know how to use ICT hardware to interact with age-appropriate computer software • I know how to create content such as a video recording, stories, and/or draw a picture on screen • I know that digital literacy skills help by being able to access, understand and interact with a range of technologies • I know how to use the internet with adult supervision to find and retrieve information of interest to them	I know that tools can be changed to produce different outcomes. I know to choose options to achieve a desired effect. I know the impact of choices made. I know how to use basic tools to create an image. I know how to use a wider variety of tools to create images.	I know how to use a computer to create a piece of music. I know how to listen to music. I know how music can make us think and feel. I know that music is made by humans. I know how music can be used in different ways. I know that there are patterns in music. I know how music is made from a series of notes. I know how to create music for a purpose. I know how different musical sequences create different effects. I know how to review and refine our computer work.	I know how text and images can be used together to convey information. I know that landscape and portrait are two different page orientations. I know how different layouts can suit different purposes. I know that DTP pages can be structured with placeholders. I know the benefits of using a DTP application. I know how different font styles and effects are used for particular purposes.	I know how to use a computer to (further) manipulate images. I know how to arrange (rotate, flip). I know how to crop. I know how to adjust colours. I know how to apply filters. I know how to add effects. I know how to retouch. I know how to reuse. I know how to draw. I know how to add text. I know how to open/retrieve an image. I know how to cut out a part. I know how to add an element (e.g. a border).	I know that video is moving pictures that can be combined with audio. I know the key concepts of composition. I know that some digital devices can capture video using a camera. I know that video can be captured automatically (e.g. a wildlife camera). I know that video can be captured by a person operating a camera. I know the features of a good video. I know how a video can be improved. I know that a video can be improved by editing. I know the results of choices made. I know how to capture/play back/edit video.	I know the relationship between HTML and visual display. I know the need to preview pages (different screens / devices). I know the need for a navigation path. I know that web pages can contain different media types. I know that web pages are written by people. I know the components of a web page layout. I know the implications of linking to content owned by others. I know that a website is a set of hyperlinked web pages. I know about the ownership and use of images (copyright).

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Key Vocabulary		paint program, tool, paintbrush, erase, fill, undo, Piet Mondrian, primary colours, shape tools, line tool, fill tool, undo tool, Henri Matisse, Wassily Kandinsky, feelings, brush style, Georges Seurat, Pointillism, brush size, Pictures, painting, computers, like, prefer, dislike	Music, planets, Mars, Venus, war, peace, quiet, loud, feelings, emotions, Pattern, rhythm, pulse, Neptune, pitch, tempo, rhythm, notes, instrument, Create, pulse/beat, Open, edit,	Advantages, benefits, communicate, content, copy, desktop publishing, disadvantages, font, font style, images, landscape, orientation, paste, placeholder, portrait, purpose, template, text	Adjustments, arrange, border, brighten, clone, colours, composition, copyright, crop, digital, edit, effects, elements, flip, hue/saturation, illustrator, layer, magic wand, original, pixels, publication, recolour, retouch, rotate, save, search, select, sepia, shapes, sharpen, undo, version, vignette	Audio, camera, clip, close up, delete, evaluate, export, filming, high angle, import, lens, long shot, low angle, microphone, mid-range, moving subject, normal angle, pan/panning, reorder, reshoot, review, share, side by side, split, static camera, storyboard, talking head, tilt, trim, video, video camera, zoom	breadcrumb trail, browser, copyright, device, embed, evaluate, external link, fair use, Google Sites, header, home page, hyperlink, hypertext markup language (HTML), implication, layout, logo, media, navigation, preview, purpose, subpage, webpage, website
Topic / Coverage	Me and My Community Sparkle and Shine Winter Wonderland Puddles and Rainbows Dangerous Dinosaurs Big, Wide, World	Dinosaur Planet (Summer 1)	Tunnels, Turrets and Towers (Spring 1)	(Autumn 1)	(Summer 2)	(Summer 1)	(Autumn 2)

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	DATA AND INFORMATION						
	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
National Curriculum		**Information Technology – Software** Use technology purposefully to create, organize, store, manipulate and retrieve digital content **Online Safety** 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.		**Information Technology – Software** 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. **Information Technology – Searching (Year 5 ONLY)** Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.			
Skills	I can complete a simple program on an electronic device. I can use ICT hardware to interact with computer software. I can create a video recording, story, and/or draw a picture on screen. I can use a range of technologies to develop my digital literacy skills. I can use the internet with adult supervision to find and retrieve information.	**Grouping Data** I can identify some attributes of an object. I can collect simple data. I can show that collected data can be counted. I can describe the properties of an object. I can choose an attribute to group objects by. I can group objects to answer questions. I can explain that objects can be grouped by similarities (attributes). I can describe a group of objects (based on commonality).	**Pictograms** I can show that I can enter data onto a computer. I can recognise that people, animals and objects can be described by attributes. I can use a computer to view data in different formats. I can use pictograms to answer single-attribute questions. I can use a computer to answer comparison questions (graphs, tables).	**Branching Databases** I can retrieve information from different levels of the branching database. I can create questions with yes/no answers.	**Data Logging** I can choose how often to automatically collect data samples. I can use a computer program to sort data by one attribute. I can present data in a table. I can present data in a graph.	**Flat-file Databases** I can navigate a flat-file database. I can design a structure for a flat-file database. I can choose different ways to view data. I can ask questions that need more than one attribute to answer. I can choose which attribute to sort data by to answer a given question. I can choose which attribute and value to search by to answer a given question (operands). I can choose multiple criteria to search data to answer a given question (AND and OR). I can select an appropriate graph to visually compare data. I can choose suitable ways to present information to other people.	**Spreadsheets** I can recognise that data can be calculated using different operations. I can recognise that changing inputs also changes outputs. I can apply formulas to data, including duplication.

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Knowledge	**Range 6:** • I know how to omplete a simple program on an electronic devices • I know how to use ICT hardware to interact with age-appropriate computer software • I know how to create content such as a video recording, stories, and/or draw a picture on screen • I know that digital literacy skills help by being able to access, understand and interact with a range of technologies • I know how to use the internet with adult supervision to find and retrieve information of interest to me.	I know that objects can be counted. I know that information can be presented. I know that information can be presented in different ways.	I know how to use a tally chart to collect data. I know how to compare objects that have been grouped by attribute. I know how to suggest appropriate headings for tally charts and pictograms. I know how to construct (complete) a given comparison question. I know how to use a computer program to present information in different ways. I know how to explain that we can present information using a computer. I know how to give simple examples of why some information should not be shared.	I know how to investigate questions with yes/no answers. I know the object attributes needed to collect relevant data. I know how to select an attribute to separate objects into two similarly sized groups. I know that data can be used to answer questions. I know what data needs to be collected to answer a specific question. I know how to relate two levels of a branching database using AND. I know how to compare the information shown in a pictogram with a branching database.	I know that questions can be answered using a given data set. I know that a sensor can be used as an input device for data collection. I know that a data logger captures 'data points' from sensors over time. I know the data that we need to answer questions. I know that sensors are input devices. I know how to use a larger data set to find. I know how to use a digital device to collect data. automatically information I know how to export information in different formats.	I know how to design an approach to answer a question using a database. I know that a computer program can be used to organise data. I know how ordering data allows us to answer some questions. I know that we present information to communicate a message. I know that tools can be used to select data to answer questions. I know that computer programs can be used to compare data visually. I know how operands can be used to filter data. I know how 'AND' and 'OR' can be used to refine data selection.	I know questions that can be answered using data. I know that objects/artifacts can be described using data. I know that there are different software tools to work with data. I know how to evaluate results in comparison to the question asked. I know that formulas can be used to produce calculated data I know what makes good questions to answer with data. I know what an item of data is. I know how to form simple, relevant questions that can be answered using data. I know that computers deal with different data types in different ways. I know why data should be organised. I know how to choose suitable ways to represent data.
Key Vocabulary		Object, label, group, search, image, property, label, colour, size, shape, property, value, label, colour, data set, value,	More than, less than, most, least, organise, data, object, tally chart, votes, total, enter, data, tally chart, compare, objects, count, pictogram,	attribute, branching database, compare, database, decision tree, equal, even, information, objects, order, organise,	analyse, collection, conclusion, data, data logger, data set, export, import, input device,	axis, chart, field, filter, graph, group, presentation, record, search, sort	calculation, cell reference, cells, columns, comparison, data heading, duplicate, evaluate, formula, input, operation,

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		more, less, most, fewest, data set, least, fewest, the same	explain, more, less, more common, least common, Attribute, group, same, different, object, most popular, least popular, conclusion, block diagram, common, sharing, data	pictogram, questions, separate, structure, table, value	logged, review, sensor, table (layout)		organised, output, propose, question, range, results, rows, sigma
Topic / Coverage	Me and My Community Sparkle and Shine Winter Wonderland Puddles and Rainbows Dangerous Dinosaurs Big, Wide, World	Enchanted Woodland (Spring 1)	Great Fire of London (Spring 2)	(Autumn 2)	(Summer 1)	(Summer 2)	(Summer 2)

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	PROGRAMMING A						
	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
National Curriculum		**Computer Science** 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		**Computer Science** 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 **Information Technology – Software** 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.			

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Skills	I can complete a simple program on an electronic device. I can use ICT hardware to interact with computer software.	**Moving a Robot** I can choose a series of words that can be enacted as a program. I can choose a series of commands that can be run as a program. I can run a program on a device.	**Robot Algorithms** I can choose a series of words that can be enacted as a sequence. I can explain what happens when we change the order of instructions. I can choose a series of commands that can be run as a program. I can trace a sequence to make a prediction. I can test a prediction by running the sequence. I can create and debug a program that has been written. I can run a program on a device.	**Sequence** I can build a sequence of commands. I can combine commands in a program. I can order commands in a program. I can create a sequence of commands to produce a given outcome.	**Repetition in Shapes** I can list an everyday task as a set of instructions including repetition. I can use an indefinite loop to produce a given outcome. I can use a count-controlled loop to produce a given outcome. I can plan a program that includes appropriate loops to produce a given outcome. I can recognise tools that enable more than one process to be run at the same time (concurrency). I can create two or more sequences that run at the same time.	**Selection in Physical Computing** I can create a condition-controlled loop. I can use a condition in an 'if...then…' statement to start an action. I can use selection to switch the program flow in one of two ways. I can use a condition in an 'if...then...else…' statement to produce given outcomes.	**Variables in Games** I can identify a variable in an existing program. I can experiment with the value of an existing variable. I can choose the name that identifies the role of a variable to make it more usable. I can decide where in a program to set a variable. I can update a variable with a user input. I can use an event in a program to update a variable. I can use a variable in a conditional statement to control the flow of a program. I can use the same variable in more than one location in a program.
Knowledge	**Range 6:** • I know how to complete a simple program on electronic devices • I know how to use ICT hardware to interact with age-appropriate computer software	I know how to enact a given word. I know words that can be enacted. I know how to predict the outcome of a command on a device. I know which commands can be used on a given device. I know what a given command does. I know how to match a command to an outcome. I know how to run a command (press a button).	I know how to describe that a series of instructions is a sequence. I know how to recall that a series of instructions can be issued before they are enacted. I know how to use logical reasoning to predict the outcome of a program.	I know that programs start because of an input. I know what a sequence is. I know that a program includes sequences of commands. I know that the sequence of a program is a process. I know that the order of commands can affect a program's output. I know that different sequences can achieve the same output. I know that different sequences can achieve different outputs.	I know what 'repeat' means I know everyday tasks that include repetition as part of a sequence, e.g. brushing teeth, dance moves. I know that we can use a loop command in a program to repeat instructions. I know how to identify patterns in a sequence. I know that in programming there are indefinite loops and count-controlled loops. I know that an indefinite loop will run until the program is stopped.	I know that a condition can only be true or false. I know that a count-controlled loop contains a condition. I know the difference between a count-controlled loop with a condition-controlled loop. I know that a condition-controlled loop will stop when a condition is met. I know that when a condition is met, a loop will complete a cycle before it stops.	I know that a variable is something that is changeable. I know examples of information that is variable, e.g. a football score during a match. I know that a variable is something that we can use in a program, e.g. score I know that a program variable is a single placeholder in memory for a single value. I know that a variable has a name and a value.

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		I know to choose a command for a given purpose. I know that a program is a set of commands a computer can run. I know that a series of instructions can be issued before they are enacted. I know how to build a sequence of commands in steps. I know how to combine commands in a program.			I know when to use a loop and when not to. I know the importance of instruction order in a loop. I know how to identify a loop within a program. I know that you can program a loop to stop after a specific number of times. I know how to identify patterns in a sequence, e.g. 'step 3 times' means the same as 'step, step, step'. I know that not all tools enable more than one process to be run at once.	I know that selection can be used to branch the flow of a program. I know that a loop can be used to repeatedly check whether a condition has been met. I know the importance of instruction order in 'if...then...else...' statements.	I know that the value of a variable can be used by a program. I know that the value of a variable can be updated. I know the way that a variable is changed. I know that a variable can be set as a constant (fixed value). I know the importance of setting up a variable at the start of a program. I know that there is only one value for a variable at a time. I know that if you change the value of a variable, you cannot access the previous value. I know that if you read a variable, the value remains. I know that the name of a variable is meaningless to a computer. I know that the name of a variable needs to be unique.
Key Vocabulary		Forwards, backwards, turn, clear, go, commands, Instructions, directions, Left, right, turn, Plan, algorithm, program, Route,	Instruction, sequence, clear, unambiguous, algorithm, program, order, algorithm, commands, prediction, Artwork, design, route, mat, Debugging,	action, algorithm, backdrop, bug, code, commands, costume, debug, design, errors, event, glide, go to, logic, motion block, move, order, pen down, pen up, point in direction, programming blocks, resize, run the code, Scratch, sequence, setup,	animate, code-snippet, count-controlled loop, decompose, design, evaluate, event block, forever, infinite loop, loop, modify, pattern, procedure, program, refine, repeat, repetition, trace, value	action, answer, battery box, components, condition, conditional statement, connect, connection, constructive, crocodile clips, design, FALSE, implement, input, LED, microcontroller, motor, outcomes, output, output component, question, run, selection, share, switch, TRUE	accelerometer, artwork, change, compass, direction, flashing, if then else, improve, name, navigation, plan, process, project, random, sensing, set, step counter, USB, value, variable

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				sprite, stage, task, test, turn			
Topic / Coverage	Me and My Community Sparkle and Shine Winter Wonderland Puddles and Rainbows Dangerous Dinosaurs Big, Wide, World	Moon Zoom (Autumn 2)	Beachcombers (Autumn 2)	(Spring 2)	(Spring 1)	(Autumn 2)	(Spring 2)

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	PROGRAMMING B						
	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
National Curriculum		**Computer Science** 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		**Computer Science** 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 **Information Technology – Software** 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.		
Skills	I can complete a simple program on an electronic device. I can use ICT hardware to interact with computer software.	**Introduction to Animation** I can choose a series of words that can be enacted as a program. I can choose a series of commands that can be run as a program. I can run a program on a device.	**An Introduction to Quizzes** I can choose a series of words that can be enacted as a sequence. I can explain what happens when we change the order of instructions. I can choose a series of commands that can be run as a program. I can create and debug a program that has been written. I can run a program on a device. I can trace a sequence to make a prediction. I can test a prediction by running the sequence.	**Events and Actions** I can build a sequence of commands. I can combine commands in a program. I can order commands in a program. I can create a sequence of commands to produce a given outcome.	**Repetition in Games** I can list an everyday task as a set of instructions including repetition. I can use an indefinite loop to produce a given outcome. I can use a count-controlled loop to produce a given outcome. I can plan a program that includes appropriate loops to produce a given outcome. I can recognise tools that enable more than one process to be run at the same time (concurrency). I can create two or more sequences that run at the same time.	**Selection in Quizzes** I can experiment with a repeat-until loop. I can use a condition in an 'if... then...' statement to produce a given outcome. I can show that a condition can switch program flow in one of two ways. I can use a condition in an 'if... then... else...' statement to produce given outcomes.	**Sensing** I can identify a variable in an existing program. I can experiment with the value of an existing variable. I can choose the name that identifies the role of a variable to make it more usable. I can decide where in a program to set a variable. I can update a variable with a user input. I can use an event in a program to update a variable. I can use a variable in a conditional statement to control the flow of a program. I can use the same variable in more than one location in a program.

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Knowledge	**Range 6:** • I know how to completes a simple program on electronic devices • I know how to use ICT hardware to interact with age-appropriate computer software	I know how to enact a given word. I know words that can be enacted. I know how to predict the outcome of a command on a device. I know which commands can be used on a given device. I know what a given command does. I know how to match a command to an outcome. I know how to run a command (press a button). I know to choose a command for a given purpose. I know that a program is a set of commands a computer can run. I know that a series of instructions can be issued before they are enacted. I know how to build a sequence of commands in steps. I know how to combine commands in a program.	I know how to describe a series of instructions as a 'sequence'. I know how to recall that a series of instructions can be issued before they are enacted. I know how to use logical reasoning to predict the outcome of a program.	I know that programs start because of an input. I know what a sequence is. I know that a program includes sequences of commands. I know that the sequence of a program is a process. I know that the order of commands can affect a program's output. I know that different sequences can achieve the same output. I know that different sequences can achieve different outputs.	I know what 'repeat' means I know everyday tasks that include repetition as part of a sequence, e.g. brushing teeth, dance moves. I know that we can use a loop command in a program to repeat instructions. I know how to identify patterns in a sequence. I know that in programming there are indefinite loops and count-controlled loops. I know that an indefinite loop will run until the program is stopped. I know when to use a loop and when not to. I know the importance of instruction order in a loop. I know how to identify a loop within a program. I know that you can program a loop to stop after a specific number of times. I know how to identify patterns in a sequence, e.g. 'step 3 times' means the same as 'step, step, step'. I know that not all tools enable more than one process to be run at once.	I know that conditional statements are used in computer programs. I know that a conditional statement connects a condition to an outcome. I know that a condition is something that can either be true or false. I know that instructions in a program will produce specific outcomes. I know that a count-controlled loop contains a condition. I know that program flow can branch according to a condition. I know the importance of instruction order in 'if... then…' statements. I know that a loop can be used to repeatedly check whether a condition has been met. I know the importance of instruction order in 'if... then... else...' statements. I know that a loop can stop when a condition is met, e.g. number of times. I know that a sequence within a count-controlled or event-controlled loop. I know that a loop can stop when a condition is met, e.g. an event. I know how to modify a count-controlled or event-controlled loop.	I know that a variable is something that is changeable. I know examples of information that is variable, e.g. a football score during a match. I know that a variable is something that we can use in a program, e.g. score I know that a program variable is a single placeholder in memory for a single value. I know that a variable has a name and a value. I know that the value of a variable can be used by a program. I know that the value of a variable can be updated. I know the way that a variable is changed. I know that a variable can be set as a constant (fixed value). I know the importance of setting up a variable at the start of a program. I know that there is only one value for a variable at a time. I know that if you change the value of a variable, you cannot access the previous value. I know that if you read a variable, the value remains. I know that the name of a variable is meaningless to a computer.

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						I know how to create a count-controlled or event-controlled loop.	I know that the name of a variable needs to be unique.
Key Vocabulary		ScratchJr, Bee-Bot, command, sprite, compare, programming, programming area, joining, command, start block, run, program, programming area, background, delete, reset, algorithm, predict, Effect, change, value, block, Instructions, appropriate, design, programming blocks,	Sequence, command, program, run, program, start, outcome, predict, program, blocks, Sprite, algorithm, design, sequence, Actions, sprite, project, blocks, modify, change, build, match, Compare, debug, features, evaluate	action, algorithm, backdrop, bug, code, commands, costume, debug, design, errors, event, glide, go to, logic, motion block, move, order, pen down, pen up, point in direction, programming blocks, resize, run the code, Scratch, sequence, setup, sprite, stage, task, test, turn	animate, code-snippet, count-controlled loop, decompose, design, evaluate, event block, forever, infinite loop, loop, modify, pattern, procedure, program, refine, repeat, repetition, trace, value	action, answer, battery box, components, condition, conditional statement, connect, connection, constructive, crocodile clips, design, FALSE, implement, input, LED, microcontroller, motor, outcomes, output, output component, question, run, selection, share, switch, TRUE	accelerometer, artwork, change, compass, direction, flashing, if then else, improve, name, navigation, plan, process, project, random, sensing, set, step counter, USB, value, variable
Topic / Coverage	Me and My Community Sparkle and Shine Winter Wonderland Puddles and Rainbows Dangerous Dinosaurs Big, Wide, World	Bright Lights, Big City (Summer 2)	Muck, Mess and Mixtures (Summer 2)	(Summer 1)	(Spring 2)	(Spring 1)	(Summer 1)

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	DIGITAL LITERACY and OPERATIONAL SKILLS						
	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Skills	• I can open up a keyboard • I can press the keys on a keyboard and know that it will show letters • I can type simple CVC words on a computer	• I can add and remove text • I can make text bold • I can use italic text • I can underline • I can select text • I can change the font of text • I can logon/off digital devices • I can shut down a computer correctly • I can use the shift key to type a capital letter • I can use backspace • I can use the mouse/trackpad to draw	• I can use the mouse or arrow keys to insert words and sentences • I can use undo • I can upload • I can change size/colour and style of text. • I can use two hands when typing • I can search using a school approved web browser • I can insert the @ symbol • I can type using the space bar, return key and basic punctuation	• I can upload from digital devices and the Internet to a shared space • I can access my work from any school computer by logging into my Google account • I can edit and save my work in own account • I can insert/cut/ copy/paste • I can use CTRL+C and CTRL+V to copy and paste • I can use SHIFT for capitals rather than CAPS LOCK • I can use undo/redo • I can align titles • I can change font, font size, colour in a Google doc • I can type with two hands and type a wider range of appropriate punctuation	• I can use the online Dictionary/thesaurus • I can use the snipping tool to take a screen shot • I can use SHIFT CTRL Show Windows to take a screen shot on a Chromebook • I can edit literacy work using Google docs/slides • I can use spell checker • I can share work in my Google account • I can use CTRL+Z to undo and CTRL+Y to redo • I can type using all letter, number and punctuation keys • I can highlight and drag to move text/images around	• I can use an online dictionary/thesaurus to search out level specific grammar and vocabulary independently • I can use a variety of techniques to save and annotate on screen projects (screenshots/snipping) • I can find, save, crop and edit images to suit needs of projects • I can use spellchecker and grammar checker to ensure consistency throughout work • I can collaborate on one document with peers • I can use of CTRL F to find words in a document and CTRL K to animate • I can use doc.new / slides.new /form.new • I can use HOME/END keys to go to the beginning/end of a line • I can type using all letter, number and punctuation keys	• I can select suitable software to edit and redraft written work • I can use a variety of keyboard shortcuts to improve efficiency on computing systems • I can use CTRL+O to open files and CTRL D to duplicate • I can use CTRL+HOME and CTRL+END to go to the beginning/end of a document • I can type all keys using correct finger placement

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	ONLINE SAFETY (Education for a Connected World)						
	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
	Self-Image and Identity						
Skills /Knowledge	I can recognise, online or offline, that anyone can say 'no' / 'please stop' / 'I'll tell' / 'I'll ask' to somebody who makes them feel sad, uncomfortable, embarrassed or upset	I can recognise that there may be people online who could make someone feel sad, embarrassed or upset. If something happens that makes me feel sad, worried, uncomfortable or frightened I can give examples of when and how to speak to an adult I can trust and how they can help.	I can explain how other people may look and act differently online and offline. I can give examples of issues online that might make someone feel sad, worried, uncomfortable or frightened; I can give examples of how they might get help.	I can explain what is meant by the term 'identity'. I can explain how people can represent themselves in different ways online. I can explain ways in which someone might change their identity depending on what they are doing online (e.g. gaming; using an avatar; social media) and why.	I can explain how my online identity can be different to my offline identity. I can describe positive ways for someone to interact with others online and understand how this will positively impact on how others perceive them. I can explain that others online can pretend to be someone else, including my friends, and can suggest reasons why they might do this.	I can explain how identity online can be copied, modified or altered. I can demonstrate how to make responsible choices about having an online identity, depending on context.	I can identify and critically evaluate online content relating to gender, race, religion, disability, culture and other groups, and explain why it is important to challenge and reject inappropriate representations online. I can describe issues online that could make anyone feel sad, worried, uncomfortable or frightened. I know and can give examples of how to get help, both on and offline. I can explain the importance of asking until I get the help needed.
	Online Relationships						
Skills /Knowledge	I can recognise some ways in which the internet can be used to communicate. I can give examples of how I (might) use technology to communicate with people I know.	I can give examples of when I should ask permission to do something online and explain why this is important. I can use the internet with adult support to communicate with people I know (e.g. video call apps or services).	I can give examples of how someone might use technology to communicate with others they don't also know offline and explain why this might be risky. (e.g. email, online gaming, a pen-pal in another school / country) I can explain who I should ask before sharing things	I can describe ways people who have similar likes and interests can get together online. I can explain what it means to 'know someone' online and why this might be different from knowing someone offline.	I can describe strategies for safe and fun experiences in a range of online social environments (e.g. livestreaming, gaming platforms). I can give examples of how to be respectful to others online and describe how to recognise healthy and	I can give examples of technology-specific forms of communication (e.g. emojis, memes and GIFs). I can explain that there are some people I communicate with online who may want to do me or my friends harm. I can recognise that this is not my/our fault.	I can explain how sharing something online may have an impact either positively or negatively. I can describe how to be kind and show respect for others online including the importance of respecting boundaries regarding what is shared about them online and

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		I can explain why it is important to be considerate and kind to people online and to respect their choices. I can explain why things one person finds funny or sad online may not always be seen in the same way by others.	about myself or others online. I can describe different ways to ask for, give, or deny my permission online and can identify who can help me if I am not sure. I can explain why I have a right to say 'no' or 'I will have to ask someone'. I can explain who can help me if I feel under pressure to agree to something I am unsure about or don't want to do. I can identify who can help me if something happens online without my consent. I can explain how it may make others feel if I do not ask their permission or ignore their answers before sharing something about them online. I can explain why I should always ask a trusted adult before clicking 'yes', 'agree' or 'accept' online.	I can explain what is meant by 'trusting someone online', why this is different from 'liking someone online', and why it is important to be careful about who to trust online including what information and content they are trusted with. I can explain why someone may change their mind about trusting anyone with something if they feel nervous, uncomfortable or worried. I can explain how someone's feelings can be hurt by what is said or written online. I can explain the importance of giving and gaining permission before sharing things online; how the principles of sharing online is the same as sharing offline e.g. sharing images and videos.	unhealthy online behaviours. I can explain how content shared online may feel unimportant to one person but may be important to other people's thoughts, feelings and beliefs.	I can describe some of the ways people may be involved in online communities and describe how they might collaborate constructively with others and make positive contributions. (e.g. gaming communities or social media groups). I can explain how someone can get help if they are having problems and identify when to tell a trusted adult. I can demonstrate how to support others (including those who are having difficulties) online.	how to support them if others do not. I can describe how things shared privately online can have unintended consequences for others. e.g. screen-grabs. I can explain that taking or sharing inappropriate images of someone (e.g. embarrassing images), even if they say it is okay, may have an impact for the sharer and others; and who can help if someone is worried about this.
	Online Reputation						
Skills /Knowledge	I can identify ways that I can put information on the internet.	I can recognise that information can stay online and could be copied. I can describe what information I should not put online without asking a trusted adult first.	I can explain how information put online about someone can last for a long time. I can describe how anyone's online information could be seen by others.	I can explain how to search for information about others online. I can give examples of what anyone may or may not be willing to share about themselves online.	I can describe how to find out information about others by searching online. I can explain ways that some of the information about anyone online could have been created, copied or shared by others.	I can search for information about an individual online and summarise the information found. I can describe ways that information about anyone online can be used by	I can explain the ways in which anyone can develop a positive online reputation. I can explain strategies anyone can use to protect their 'digital personality' and online reputation,

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			I know who to talk to if something has been put online without consent or if it is incorrect.	I can explain the need to be careful before sharing anything personal. I can explain who someone can ask if they are unsure about putting something online.		others to make judgments about an individual and why these may be incorrect.	including degrees of anonymity.
	Online Bullying						
Skills /Knowledge	I can describe ways that some people can be unkind online. I can offer examples of how this can make others feel.	I can describe how to behave online in ways that do not upset others and can give examples	I can explain what bullying is, how people may bully others and how bullying can make someone feel. I can explain why anyone who experiences bullying is not to blame. I can talk about how anyone experiencing bullying can get help.	I can describe appropriate ways to behave towards other people online and why this is important. I can give examples of how bullying behaviour could appear online and how someone can get support.	I can recognise when someone is upset, hurt or angry online. I can describe ways people can be bullied through a range of media (e.g. image, video, text, chat). I can explain why people need to think carefully about how content they post might affect others, their feelings and how it may affect how others feel about them (their reputation).	I can recognise online bullying can be different to bullying in the physical world and can describe some of those differences. I can describe how what one person perceives as playful joking and teasing (including 'banter') might be experienced by others as bullying. I can explain how anyone can get help if they are being bullied online and identify when to tell a trusted adult. I can identify a range of ways to report concerns and access support both in school and at home about online bullying. I can explain how to block abusive users. I can describe the helpline services which can help people experiencing bullying, and how to access them (e.g. Childline or The Mix).	I can describe how to capture bullying content as evidence (e.g screen-grab, URL, profile) to share with others who can help me. I can explain how someone would report online bullying in different contexts.
	Managing Online Information						

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Skills /Knowledge	I can talk about how to use the internet as a way of finding information online. I can identify devices I could use to access information on the internet.	I can give simple examples of how to find information using digital technologies, e.g. search engines, voice activated searching). I know / understand that we can encounter a range of things online including things we like and don't like as well as things which are real or make believe / a joke. I know how to get help from a trusted adult if we see content that makes us feel sad, uncomfortable worried or frightened.	I can use simple keywords in search engines. can demonstrate how to navigate a simple webpage to get to information I need (e.g. home, forward, back buttons; links, tabs and sections). I can explain what voice activated searching is and how it might be used, and know it is not a real person (e.g. Alexa, Google Now, Siri). can explain the difference between things that are imaginary, 'made up' or 'make believe' and things that are 'true' or 'real'. I can explain why some information I find online may not be real or true.	I can demonstrate how to use key phrases in search engines to gather accurate information online. I can explain what autocomplete is and how to choose the best suggestion. I can explain how the internet can be used to sell and buy things. I can explain the difference between a 'belief', an 'opinion' and a 'fact. and can give examples of how and where they might be shared online, e.g. in videos, memes, posts, news stories etc. I can explain that not all opinions shared may be accepted as true or fair by others (e.g. monsters under the bed). I can describe and demonstrate how we can get help from a trusted adult if we see content that makes us feel sad, uncomfortable, worried or frightened.	I can analyse information to make a judgement about probable accuracy and I understand why it is important to make my own decisions regarding content and that my decisions are respected by others. I can describe how to search for information within a wide group of technologies and make a judgement about the probable accuracy (e.g. social media, image sites, video sites). I can describe some of the methods used to encourage people to buy things online (e.g. advertising offers; in-app purchases, pop-ups) and can recognise some of these when they appear online. I can explain why lots of people sharing the same opinions or beliefs online do not make those opinions or beliefs true. I can explain that technology can be designed to act like or impersonate living things (e.g. bots) and describe what the benefits and the risks might be. I can explain what is meant by fake news e.g. why some people will create stories or alter	I can explain the benefits and limitations of using different types of search technologies e.g. voice-activation search engine. I can explain how some technology can limit the information I aim presented with e.g. voice-activated searching giving one result. I can explain what is meant by 'being sceptical'; I can give examples of when and why it is important to be 'sceptical'. I can evaluate digital content and can explain how to make choices about what is trustworthy e.g. differentiating between adverts and search results. I can explain key concepts including: information, reviews, fact, opinion, belief, validity, reliability and evidence. I can identify ways the internet can draw us to information for different agendas, e.g. website notifications, pop-ups, targeted ads. I can describe ways of identifying when online content has been commercially sponsored or boosted, (e.g. by commercial companies or by vloggers, content creators, influencers).	I can explain how search engines work and how results are selected and ranked. I can explain how to use search technologies effectively. I can describe how some online information can be opinion and can offer examples. I can explain how and why some people may present 'opinions' as 'facts'; why the popularity of an opinion or the personalities of those promoting it does not necessarily make it true, fair or perhaps even legal. I can define the terms 'influence', 'manipulation' and 'persuasion' and explain how someone might encounter these online (e.g. advertising and 'ad targeting' and targeting for fake news). I understand the concept of persuasive design and how it can be used to influences peoples' choices. I can demonstrate how to analyse and evaluate the validity of 'facts' and information and I can explain why using these strategies are important. I can explain how companies and news providers target people

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					photographs and put them online to pretend something is true when it isn't.	I can explain what is meant by the term 'stereotype', how 'stereotypes' are amplified and reinforced online, and why accepting 'stereotypes' may influence how people think about others. I can describe how fake news may affect someone's emotions and behaviour, and explain why this may be harmful. I can explain what is meant by a 'hoax'. I can explain why someone would need to think carefully before they share.	with online news stories they are more likely to engage with and how to recognise this. I can describe the difference between online misinformation and dis-information. I can explain why information that is on a large number of sites may still be inaccurate or untrue. I can assess how this might happen (e.g. the sharing of misinformation or disinformation). I can identify, flag and report inappropriate content.
	Health, Well-being and Lifestyle						
Skills /Knowledge	I can identify rules that help keep us safe and healthy in and beyond the home when using technology I can give some simple examples of these rules.	I can explain rules to keep myself safe when using technology both in and beyond the home.	I can explain simple guidance for using technology in different environments and settings e.g. accessing online technologies in public places and the home environment. I can say how those rules / guides can help anyone accessing online technologies.	I can explain why spending too much time using technology can sometimes have a negative impact on anyone, e.g. mood, sleep, body, relationships; I can give some examples of both positive and negative activities where it is easy to spend a lot of time engaged (e.g. doing homework, games, films, videos). I can explain why some online activities have age restrictions, why it is important to follow them and know who I	I can explain how using technology can be a distraction from other things, in both a positive and negative way. I can identify times or situations when someone may need to limit the amount of time they use technology e.g. I can suggest strategies to help with limiting this time.	I can describe ways technology can affect health and well-being both positively (e.g. mindfulness apps) and negatively. I can describe some strategies, tips or advice to promote health and wellbeing with regards to technology. I recognise the benefits and risks of accessing information about health and well-being online and how we should balance this with talking to trusted adults and professionals. I can explain how and why some apps and games may request or take payment	I can describe common systems that regulate age-related content (e.g. PEGI, BBFC, parental warnings) and describe their purpose. I recognise and can discuss the pressures that technology can place on someone and how / when they could manage this. I can recognise features of persuasive design and how they are used to keep users engaged (current and future use). I can assess and action different strategies to limit the impact of technology on health (e.g.

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				can talk to if others pressure me to watch or do something online that makes me feel uncomfortable (e.g. age restricted gaming or web sites).		for additional content (e.g. in-app purchases, loot boxes) and explain the importance of seeking permission from a trusted adult before purchasing.	night-shift mode, regular breaks, correct posture, sleep, diet and exercise).
	Privacy and Security						
Skills /Knowledge	I can identify some simple examples of my personal information (e.g. name, address, birthday, age, location). I can describe who would be trustworthy to share this information with; I can explain why they are trusted.	I can explain that passwords are used to protect information, accounts and devices. I can recognise more detailed examples of information that is personal to someone (e.g where someone lives and goes to school, family names). I can explain why it is important to always ask a trusted adult before sharing any personal information online, belonging to myself or others.	can explain how passwords can be used to protect information, accounts and devices. I can explain and give examples of what is meant by 'private' and 'keeping things private'. I can describe and explain some rules for keeping personal information private (e.g. creating and protecting passwords). I can explain how some people may have devices in their homes connected to the internet and give examples (e.g. lights, fridges, toys, televisions).	I can describe simple strategies for creating and keeping passwords private. I can give reasons why someone should only share information with people they choose to and can trust. I can explain that if they are not sure or feel pressured then they should tell a trusted adult. I can describe how connected devices can collect and share anyone's information with others.	I can describe strategies for keeping personal information private, depending on context. I can explain that internet use is never fully private and is monitored, e.g. adult supervision. I can describe how some online services may seek consent to store information about me; I know how to respond appropriately and who I can ask if I am not sure. I know what the digital age of consent is and the impact this has on online services asking for consent.	I can explain what a strong password is and demonstrate how to create one. I can explain how many free apps or services may read and share private information (e.g. friends, contacts, likes, images, videos, voice, messages, geolocation) with others. I can explain what app permissions are and can give some examples.	I can describe effective ways people can manage passwords (e.g. storing them securely or saving them in the browser). I can explain what to do if a password is shared, lost or stolen. I can describe how and why people should keep their software and apps up to date, e.g. auto updates. I can describe simple ways to increase privacy on apps and services that provide privacy settings. I can describe ways in which some online content targets people to gain money or information illegally; I can describe strategies to help me identify such content (e.g. scams, phishing). I know that online services have terms and conditions that govern their use.
	Copyright and Ownership						

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Skills /Knowledge	I know that work I create belongs to me. I can name my work so that others know it belongs to me.	I can explain why work I create using technology belongs to me. can say why it belongs to me (e.g. 'I designed it' or 'I filmed it''). can save my work under a suitable title / name so that others know it belongs to me (e.g. filename, name on content). I understand that work created by others does not belong to me even if I save a copy	I can recognise that content on the internet may belong to other people. I can describe why other people's work belongs to them.	I can explain why copying someone else's work from the internet without permission isn't fair and can explain what problems this might cause.	When searching on the internet for content to use, I can explain why I need to consider who owns it and whether I have the right to reuse it. I can give some simple examples of content which I must not use without permission from the owner, e.g. videos, music, images.	I can assess and justify when it is acceptable to use the work of others. I can give examples of content that is permitted to be reused and know how this content can be found online.	I can demonstrate the use of search tools to find and access online content which can be reused by others. I can demonstrate how to make references to and acknowledge sources I have used from the internet.