

This document provides a clear progression of skills/ knowledge to enable staff to implement computing in the best possible way to develop, support and challenge our pupils in this digital world.

There are 3 main areas of the computing curriculum: Information Technology, Computer Science and Digital Literacy.

Information Technology	Computer Science	Digital Literacy
Some are taught discretely, and the rest is taught creatively within our cross curricular approach. These should be closely linked to Digital Literacy to ensure suitability for safety & audience	Computational Thinking is solving problems with or without a computer; 'sequence' then how can it be solved; 'technical skills.' Programming-write algorithms and implement as code then debug. They evaluate & find best/most appropriate way to reach goal.	Developing effective strategies to navigate staying safe online by being aware of theirs & other's behaviours, their influences & consequences.
Multimedia:	Computational Thinking/ Unplugged	Self-Image and Identity
Word Processing/Typing	Coding/Programming	Online Relationships
• Sound	Computer Networks (KS2)	Online Reputation
 Presentations, Creating eBooks and 		Online Bullying
Web Design		Managing Online Information Health,
Photography and Digital Art		Wellbeing and Lifestyle Privacy and
Creating Video		Security
 Augmented Reality and Virtual 		Copyright and Ownership
Reality		
• Animation		
Data Handling		

Computing is taught in explicit lessons, tinkering lessons, and is used in as many cross curricular ways as we can, where it will enhance the teaching of our termly 'big questions.'



INFORMATION TECHNOLOGY: MULTIMEDIA- WORD PROCESSING/ TYPING	
Children recognise that a range of technology is used in places such as homes and schools. They select and use technology for particular purposes.	 EYFS I can play on a touch screen game and use computers/keyboards/mouse in role play. I can type letters with increasing confidence using a keyboard and tablet. I can dictate short, clear sentences into a digital device.
I.4 use technology purposefully to create, organise, store, manipulate and retrieve digital content.	I can confidently type words quickly and correctly on a digital device. I can use the space bar to make space and delete to delete letters/words. I can make a new line using enter/return. I can dictate into a digital device more accurately and with punctuation. Y2 I can use the space bar only once between words and use touch to navigate to words letter to edit. I can copy and paste images and text. I can use caps locks for capital letters. I can add images alongside text in a word-processed document. I can dictate longer passages into a digital device with accurate punctuation.
I.6 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.	 I can use index fingers on keyboard home keys (f/j), use left fingers for a/s/d/f/g, and use right fingers for h/j/k/l. I can edit the style and effect of my text and images to make my document more engaging and eye-catching. For example, borders and shadows. I can use cut, copy and paste to quickly duplicate and organise text. Y4 I can combine digital images from different sources, objects, and text to make a final piece of a variety of tasks: posters, documents, eBooks, scripts, leaflets. Confidently and regularly use text shortcuts such as cut, copy and paste and delete to organise text. Use font sizes appropriately for audience and purpose.\Use spell check and thesaurus including through Siri and other Al technology.
	 Y5 I can start to apply other useful effects to my documents such as hyperlinks.



I can import sounds to accompany and enhance the text in my document.
 I can organise and reorganise text on screen to suit a purpose.
Y6
 I can confidently choose the best application to demonstrate my learning.
I can format text to suit a purpose.
 I can publish my documents online regularly and discuss the audience and purpose of
my content.



INFORMATION TECHNOLOGY: MULTIMEDIA- PRSENTATIO	ONS, CREATING eBOOKS &WEB DESIGN
Children recognise that a range of technology is used in places such as homes and schools. They select and use technology for particular purposes.	I can record my voice over a picture. I can create a simple digital collage. I can move and resize images with my fingers or mouse.
I.4 use technology purposefully to create, organise, store, manipulate and retrieve digital content.	I can add labels to an image. I can order images to create a simple storyboard. I can create a simple spider diagram. I can sequence a series of pictures to explain my understanding of a topic. Y2 I can add voice labels to an image. I can add a voice recording to a storyboard. I can add speech bubbles to an image to show what a character thinks. I can import images to a project from the web and camera roll.
I.6 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.	 I can create an interactive comic with sounds, formatted text and video. I can annotate an image with videos. I can create a simple web page. I can create a simple digital timeline/mind map (e.g. 2Coonect). Y4 I can create an interactive quiz eBook introducing hyperlinks (2Create a story, 2Publish Plus). I can create an eBook with text, images and sound. I can create a presentation demonstrating my understanding with a range of media. I can create a digital timeline/mind map and include different media – sound and video. Y5 I can collaborate with peers using online tools, e.g. PurpleMash- 2Blog, 2Connect. I can create and export an interactive presentation including a variety of media, animations, transitions and other effects. I can create an interactive guide to an image by embedding digital content and publishing it online.



I can create a webpage and embed video.
Y6
I can create a web site which includes a variety of media.
 I can design an app prototype that links multimedia pages together with hyperlinks.
 I can choose applications to communicate to a specific audience.
I can evaluate my own content and consider ways to improvements.



INFORMATION TECHNOLOGY: MULTIMEDIA- ANIMATIO	N
Children recognise that a range of technology is used in places such as homes and schools. They select and use technology for particular	EYFS I can animate a simple image to speak in role.
purposes.	I can create a simple animation to tell a story including more than one character.
1.4 use technology purposefully to create, organise, store, manipulate and retrieve digital content.	I can add filters and stickers to enhance an animation of a character.
	I can create an animation to tell a story with more than one scene.
	I can add my own pictures to my story animation.
	Y2
	I can create multiple animations of an image and edit these together.
	I can create a simple stop motion animation.
	I can explain how an animation/flip book works.
1.6 select, use and combine a variety of software (including internet	Y3
services) on a range of digital devices to design and create a range of	I can create animations of faces to speak in role with more life-like realistic outcomes.
programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.	I can improve stop motion animation clips with techniques like onion skinning.
confecting, analysing, evaluating and presenting data and information.	 I can use animation tools in presenting software to create simple animations.
	I can take multiple animations of a character I have created and edit them together for a longer video.
	I can use software to create a 3D animated story.
	I can use line draw tool to create animations.
	Y5
	 I can record animations of different characters and edit them together to create an interview.
	I can add green screen effects to a stop motion animation.
	I can create flip book animation using digital drawings and export as a Gif or video.
	Y6
	I can mix animations and videos recordings of myself to create video interviews.
	I can plan, script, and create a 3D animation to explain a concept or tell a story.
	 I can choose and create different types of animations to best explain my learning.



INFORMATION TECHNOLOGY: MULTIMEDIA- CREATING	VIDEO
Children recognise that a range of technology is used in places such as	EYFS
homes and schools. They select and use technology for particular	I know the difference between a photography and video.
purposes.	I can record a short film using the camera.
	I can record and play a film.
	I can watch films back.
1.4 use technology purposefully to create, organise, store, manipulate	YI
and retrieve digital content.	I can record a film using the camera app.
	I can select images and record a voiceover.
	I can highlight and zoom into images as I record.
	Y2
	I can write and record a script using a teleprompter tool.
	I can use tools to add effects to a video
	I can begin to use green screen techniques with support
I.6 select, use and combine a variety of software (including internet	Y3
services) on a range of digital devices to design and create a range of	I can sequence clips of mixed media in a timeline and record a voiceover
programs, systems and content that accomplish given goals, including	I can trim and cut film clips and add titles and transitions
collecting, analysing, evaluating and presenting data and information.	I can independently create a green screen clip.
	I can create my own movie trailer.
	Y4
	I can add music and sound effects to my films.
	I can add animated titles and transitions.
	I can add simple subtitles to a video clip.
	I can use confidently use green screen adding animated backgrounds.
	Y5
	I can use cutaway and split screen tools in iMovie/ Video Editor app.
	I can evaluate and improve the best video tools to best explain my understanding.
	I can further improve green screen clips using crop and resize and explore more
	creative ways to use the tool - wearing green clothes and the masking tool.
	Y6
	I can use the green screen masking tool with more than one character.
	I can use picture in picture tools in iMovie/ / Video Editor app.
	I can add animated subtitles to my film to further enhance my creation.



 I can create videos using a range of media - green screen, animations, film and image.



INFORMATION TECHNOLOGY: MULTIMEDIA- DIGITAL AI	RT & PHOTOGRAPHY
Children recognise that a range of technology is used in places such as	EYFS
homes and schools. They select and use technology for particular	I can take a photograph.
purposes.	 I can take a photograph and use it in an app.
	 I can use a painting app and explore the paint and brush tools.
I.4 use technology purposefully to create, organise, store, manipulate and retrieve digital content.	 I can edit a photo with simple tools. I can use a paint/drawing app to create a digital image
	I can begin to cut out an image to layer on another image.
1.6 solect use and combine a variety of cofrage (including internet	 Y2 I can edit a photo (crop, filters, mark up etc). I can select and use tools to create digital imagery - controlling the pen and using the fill tool. I can cut images with accuracy to layer on other images.
I.6 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.	 I can confidently take and manipulate photos. I can create a digital image using a range of tools, pens, brushes and effects. I can create transparent images by formatting background or with Instant Alpha.
	 I can enhance digital images and photographs using crop, brightness, contrast & resize. I can manipulate shapes to create digital art. I can draw a series of images and export as an animated GIF.
	 I can take a digital photo using camera settings. I can enhance digital photos and images using crop, brightness and resize tools. I can link and explain how to photoshop images and how this is used in the media.
	 I can edit a picture to remove items, add backgrounds, merge 2photos. I can evaluate and discuss images explaining effects and filters that have been used to enhance the media. Use a 3D drawing app to create a realistic representation of world objects.



INFORMATION TECHNOLOGY: MULTIMEDIA- AR (Augmented Reality) & VR (Virtual Reality)	
Children recognise that a range of technology is used in places such as	EYFS
homes and schools. They select and use technology for particular	I can scan a QR code.
purposes.	I can explore a 360 image.
	I can talk about AR objects in my class.
1.4 use technology purposefully to create, organise, store, manipulate	YI
and retrieve digital content.	I can explore an interactive 360 image.
	I can scan a trigger image to begin an AR experience.
	I can pretend to interact with AR objects.
	Y2
	 I can draw my own 360 image and explore it in VR.
	I can bring objects into my surroundings using AR.
	I can create my own QR code.
I.6 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	 I can create my own digital 360 image and explore it in VR. I can create my own images and bring it into my surroundings through AR.
collecting, analysing, evaluating and presenting data and information.	Y4
	I can create my own 360 video.
	I can use the camera to create a 360 image.
	I can add multiple objects into my surroundings through AR to explain a concept.
	Y5
	I can create an interactive VR experience.
	I can create an animated object and bring it into my surroundings through AR
	I can create an AR experience using objects I have created to explain a concept.
	Y6
	I can create and upload my own VR Google Expedition.
	I can create an interactive poster using AR
	I can explain how VR and AR works.



INFORMATION TECHNOLOGY: MULTIMEDIA- SOUND	
Children recognise that a range of technology is used in places such as	EYFS
homes and schools. They select and use technology for particular	I can record sounds with different resources.
purposes.	 I can find ways to change your voice (tube, tin can, shouting to create an echo).
	I can record sounds/voices in storytelling and explanations.
1.4 use technology purposefully to create, organise, store, manipulate	YI
and retrieve digital content.	 I can create a sequence of sounds (instruments, apps/software).
	I can explore short and long sounds.
	I can record my voice and add different effects.
	Y2
	I can create a musical composition using software
	I can record my own sound effects.
	 I can record my voice over a composition to perform a song.
I.6 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.	 Y3 I can create and edit purposeful compositions using music software to create mood or a certain style. I can experiment with live loops to create a song.
3 , 3 5 1 5	Y4
	I can edit sound effects for a purpose.
	I can create a simple four chord song following the correct rhythm.
	I can record a radio broadcast or audiobook.
	Y5
	 I can add voice over and edit sound clips (volume, pitch, fade, effect) to create a podcast.
	I can create a remix of a popular song.
	Y6
	• I can add voice over and edit sound clips (volume, pitch, fade, effect) to use in a film or radio broadcast (podcast).
	 I can compose a soundtrack that can be added to a film project.



INFORMATION TECHNOLOGY: DATA HANDLING	
Children recognise that a range of technology is used in places such as homes and schools. They select and use technology for particular purposes. (PurpleMash: 2Count)	 EYFS I can identify a chart. I can sort physical objects, take a picture, and discuss what I have done. I can present simple data on a digital device.
I.4 use technology purposefully to create, organise, store, manipulate and retrieve digital content. (PurpleMash: 2Count, 2Investigate, 2Questio, Pic Collage, Plickers)	I can sort images or text into two or more categories on a digital device. I can collect data on a topic. I can create a tally chart and pictogram. I can record myself explaining what I have done and what it shows me. Y2 I can sort digital objects into a range of charts such as Venn diagrams, Carroll diagrams
I Callet use and cambine a variety of activities (including intermet	 and bar charts using different apps and software. I can orally record myself explaining what the data shows me. I can create a branching database using questions.
I.6 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.	 I can create my own sorting diagram and complete a data handling activity with it using images and text. I can start to input simple data into a spreadsheet. I can create a feelings chart exploring a story or character's feelings.
(PurpleMash: 2Investigate, 2Question, 2Graph, Plickers, Kahoot, Excel, Nummbers)	 I can create my own online multiple-choice questionnaire. I can input data into a spreadsheet and export the data in a variety of ways: charts, bar charts, pie charts. I understand how data is collected.
	 I can create and publish my own online questionnaire and analyse the results. I can use simple formulae to solve calculations including =sum and other statistical functions. I can edit and format difference cells in a spreadsheet. Y6 I can write spreadsheet formula to solve more challenging maths problems.



 I can create and publish my own online quiz with a range of media (images and video).



COMPUTER SCIENCE: COMPUTATIONAL THINKING	
Children recognise that a range of technology is used in places such as homes and schools. They select and use technology for particular purposes.	 EYFS I can follow simple oral algorithms. I can spot simple patterns. I can sequence simple familiar tasks.
 I.I understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions. I.2 create and debug simple programs. I.3 use logical reasoning to predict the behaviour of simple programs. 	 I understand what algorithms are. I can write simple algorithms. I understand the sequence of algorithms is important. I can debug simple algorithms. I understand that algorithms are implemented as programs on digital devices.
	 I can write algorithms for everyday tasks. I can use logical reasoning to predict the outcome of algorithms. I understand decomposition is breaking objects/processes down. I can implement simple algorithms on digital devices (Bee Bots, Apps: ScratchJr. I can debug algorithms.
 1.1 design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. 1.2 use sequence, selection, and repetition in programs; work with variables and various forms of input and output. 1.3 use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs. 1.4 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. 	 Y3 I can create algorithms for use when programming. I can decompose tasks (such as animations) into separate steps to create an algorithm. I understand abstraction is focusing on important information. I can identify patterns in an algorithm I can use repetition in algorithms. Y4 I can use abstraction to focus on what's important in my design. I can write increasingly more precise algorithms for use when programming. I can use simple selection in algorithms. I can use logical reasoning to detect and correct errors in programs.
	 I can solve problems by decomposing them into smaller parts. I can use selection in algorithms. I can recognise the need for conditions in repetition within algorithms. I can use logical reasoning to explain how a variety of algorithms work. I can use logical reasoning to detect and correct errors in algorithms.



I can evaluate my work and identify errors.
Y6
 I can recognise, and make use, of patterns across programming projects.
I can write precise algorithms for use when programming.
 I can identify variables needed and their use in selection and repetition.
I can decompose code into sections for effective debugging.
I can critically evaluate my work and suggest improvements.



COMPUTER SCIENCE: CODING & PROGRAMMING	
Children recognise that a range of technology is used in places such as homes and schools. They select and use technology for particular purposes.	 EYFS I can use a mouse, touch screen or appropriate access device to target and select options on screen. I can input a simple sequence of commands to control a digital device with support (BeeBot).
 I.I understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions. I.2 create and debug simple programs. I.3 use logical reasoning to predict the behaviour of simple programs 	I can create a simple program e.g., sequence of instructions for a BeeBot. I can use sequence in programs. I can locate and fix bugs in my program. Y2 I understand programs execute by following precise and unambiguous instructions.
I.I design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by	 I can create programs on a variety of digital devices. I can debug programs of increasing complexity. I can use logical reasoning to predict the outcome of simple programs. Y3 I can design and create programs.
decomposing them into smaller parts. 1.2 use sequence, selection, and repetition in programs; work with variables and various forms of input and output. 1.3 use logical reasoning to explain how some simple algorithms work	 I can write programs that accomplish specific goals. I can use repetition in programs I can work with various forms of input. Y4 I can use simple selection in programs.
and to detect and correct errors in algorithms and programs. I.4 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.	 I can work with various forms of output. I can use logical reasoning to systematically detect and correct errors in programs. I can work with various forms of output.
	 I can create programs by decomposing them into smaller parts. I can use selection in programs. I can use conditions in repetition commands. I can work with variables. I can create programs that control or simulate physical systems. I can evaluate my work and identify errors.
	Y6



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I can use a range of sequence, selection and repletion commands combined with
variables as required to implement my design.
 I can create procedures to hide complexity in programs.
 I can identify and write generic code for use across multiple projects.
 I can critically evaluate my work and suggest improvements.
 I can identify and use basic HTML tags (See Computer Networks objectives).



COMPUTER SCIENCE: COMPUTER NETWORKS (KS2)

1.4 understand computer networks including the internet; how they can Y3 provide multiple services, such as the world-wide web; and the opportunities they offer for communication and collaboration 1.5 Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.

- I understand that computers in a school are connected together in a network.
- I understand why computers are networked.
- I understand the difference between the Internet and the World Wide Web (WWW).

Y4

- I understand that servers on the Internet are located across the planet.
- I understand how email is sent across the Internet.
- I understand how the Internet enables us to collaborate.

Y5

- I understand how we view web pages on the Internet.
- I use search technologies effectively.
- I understand that web spiders index the web for search engines.
- I appreciate how pages are ranked in a search engine.

Y6

- I understand what HTML is and recognize HTML tags.
- I know a range of HTML tags and can remix a web page.
- I can create a webpage using HTML.



DIGITAL LITERACY: ONLINE SAFETY (Education for A Connected World- Project Evolve.)	SELF IMAGE & IDENTITY
Children recognise that a range of technology is used in places such as homes and schools. They select and use technology for particular purposes.	I can recognise that I can say 'no' / 'please stop' / 'l'll tell' / 'l'll ask' to somebody who asks me to do something that makes me feel sad, embarrassed, or upset. I can explain how this could be either in real life or online.
I.5 recognise common uses of information technology beyond school. I.6 use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about material on the internet or other online technologies.	 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.4 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. I.5 use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content. I.7 use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.	 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.
	 Y5 I can explain how identity online can be copied, modified, or altered. I can demonstrate responsible choices about my online identity, depending on context.



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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.



DIGITAL LITERACY: ONLINE SAFETY	ONLINE RELATIONSHIPS
(Education for A Connected World- Project Evolve.) Children recognise that a range of technology is used in places such as homes and schools. They select and use technology for particular purposes.	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.5 recognise common uses of information technology beyond school. I.6 use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about material on the internet or other online technologies.	 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 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. Y2 I can give examples of how someone might use technology to communicate with others they also don't 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 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.4 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. I.5 use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content. I.7 use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact. I.4 understand computer networks including the internet; how they can provide multiple services, such as the world-wide web; and the	 Y3 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 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.
opportunities they offer for communication and collaboration.	 I can describe strategies for safe and fun experiences in a range of online social environments (e.g., livestreaming, gaming platforms)



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I.5 use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating.	 I can give examples of how to be respectful to others online and describe how to recognise healthy and 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 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 friend's harm. I can recognise that this is not my / our fault. 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.
	 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 how to support them if others do not. I can describe how things shared privately online can have unintended consequences for others. e.g., screengrabs. 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.



DIGITAL LITERACY: ONLINE SAFETY (Education for A Connected World- Project Evolve.)	ONLINE REPUTATION
Children recognise that a range of technology is used in places such as homes and schools. They select and use technology for particular purposes.	I can identify ways that I can put information on the internet.
I.5 recognise common uses of information technology beyond school. I.6 use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about material on the internet or other online technologies.	 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 know who to talk to if something has been put online without consent or if it is incorrect.
I.4 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. I.5 use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content. I.7 use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.	 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 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.
	 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 describe ways that information about anyone online can be used by others to make judgments about an individual and why these may be incorrect. I can search for information about an individual online and summarise the information found.
	 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, including degrees of anonymity.



DIGITAL LITERACY: ONLINE SAFETY (Education for A Connected World- Project Evolve.)	ONLINE BULLYING
Children recognise that a range of technology is used in places such as homes and schools. They select and use technology for particular purposes.	 EYFS I can describe ways that some people can be unkind online. I can offer examples of how this can make others feel.
I.5 recognise common uses of information technology beyond school. I.6 use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have	I can describe how to behave online in ways that do not upset others and can give examples.
concerns about material on the internet or other online technologies.	 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.4 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. I.5 use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content. I.7 use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.	 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).
Y	'6
	 I can describe how to capture bullying content as evidence (e.g., screengrab, URL, profile) to share with others who can help me. I can explain how someone would report online bullying in different contexts.



DIGITAL LITERACY: ONLINE SAFETY	MANAGING ONLINE INFORMATION
(Education for A Connected World- Project Evolve.) Children recognise that a range of technology is used in places such as homes and schools. They select and use technology for particular purposes.	 EYFS I can talk about how I can use the internet to find things out. I can identify devices I could use to access information on the internet. I can give simple examples of how to find information (e.g., search engine, voice activated searching).
I.5 recognise common uses of information technology beyond school. I.6 use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about material on the internet or other online technologies.	 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. I can demonstrate how to navigate a simple webpage to get 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). I 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.4 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. I.5 use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content. I.7 use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.	 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.

Y4

- 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 photographs and put them online to pretend something is true when it isn't.

Y5

- I can use different search technologies.
- 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 am presented with.
- 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 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.

Y6

- I can use search technologies effectively.
- 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 influence people's 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 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.



DIGITAL LITERACY: ONLINE SAFETY	HEALTH, WELL-BEING & LIFESTYLE
(Education for A Connected World- Project Evolve.)	
Children recognise that a range of technology is used in places such as homes and schools. They select and use technology for particular purposes.	 EYFS 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.
1.5 recognise common uses of information technology beyond school.1.6 use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have	I can explain rules to keep us safe when we are using technology both in and beyond the home.
concerns about material on the internet or other online technologies.	 Y2 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.4 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. I.5 use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content. I.7 use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.	 I can explain why spending too much time using technology can sometimes have a negative impact on anyone; I can give some examples of both positive and negative activities where it is easy to spend a lot of time engaged. I can explain why some online activities have age restrictions, why it is important to follow them and know who I 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).
	 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 for additional content (e.g., in-app purchases, loot boxes) and explain the importance of seeking permission from a trusted adult before purchasing.
Y6
 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., night-shift mode, regular breaks, correct posture, sleep, diet and exercise).



DIGITAL LITERACY: ONLINE SAFETY	PRIVACY & SECURITY
(Education for A Connected World- Project Evolve.)	
Children recognise that a range of technology is used in places such as homes and schools. They select and use technology for particular purposes.	 EYFS I can identify some simple examples of my personal information (e.g., name, address, birthday, age, location). I can describe the people I can trust and can share this with; I can explain why I can trust them.
I.5 recognise common uses of information technology beyond school. I.6 use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about material on the internet or other online technologies.	 I can explain how passwords can be 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.
	 I 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.4 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. I.5 use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content. I.7 use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report	 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.
concerns about content and contact.	 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.

Y5

- I can explain what a strong password is and demonstrate how to create one.
- I can explain how many free apps or services. I 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.

Y6

- 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.



DIGITAL LITERACY: ONLINE SAFETY	COPYRIGHT & OWNERSHIP
(Education for A Connected World- Project Evolve.)	
Children recognise that a range of technology is used in places such as	EYFS
homes and schools. They select and use technology for particular	I know that work I create belongs to me.
purposes.	I can name my work so that others know it belongs to me.
I.5 recognise common uses of information technology beyond school. I.6 use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about material on the internet or other online technologies.	 I can explain why work I create using technology belongs to me. I can say why it belongs to me (e.g., 'I designed it' or 'I filmed it'). I can save my work under a suitable title or 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.4 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. I.5 use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content. I.7 use technology safely, respectfully and responsibly; recognise	 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.
acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.	 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.



VOCABULARY PROGRESSION

	MULTIMEDIA							
Reception	Year I	Year 2	Year 3	Year 4	Year 5	Year 6		
Screen	Videos	Paint effects	Multimedia	Animation	Online sharing	Web page		
Mouse	Camera	Templates	lmage	Creating & modifying	Multimedia effects	Fair		
Images	Tools	Animation	Page orientation	Specific purpose	Multimedia	Preview page		
Keyboard	Sounds	Documents	Presentations	Photo modifying	modification	Navigation		
Paint	lmage bank	Index finger typing	Alignment	Fake image	Transitions	Hyperlinks		
	Word bank	Pattern	Brush size	Composition	Hyperlinks	Appropriate online tools		
	Space bar	Notes	Repeats	Modify	Editing tools	Audience		
		pitch	Reflections	Keyboard shortcuts	Refining	Atmosphere		
		Enter/return	Green screening	Bullet points	Online sharing	Structure		
		Cap lock	Amend	Spell check	Duplicate	Copyright		
		Backspace	Сору	publication	Vector drawing	Information collection		
		·	Paste		Resize	HTML code		
			Media		Rotate	Storing		
			Desk publishing		Alignment grids			
			Flip book		Front/back layers			
			Stop frame		Greenscreen			
			Storyboard		Digital device			
			Onion skin					
			PROGRAMM	ING				
Reception	Year I	Year 2	Year 3	Year 4	Year 5	Year 6		
Equipment	Programming:	Forward	Algorithm	Algorithm	Microcontroller	Predicting outputs		
Buttons	Instruction	Backward	Debug	Debug	Micro: bit	Plan, program, test &		
Movement	Buttons	Right-angle turn	Program	Program	flow	review a program		
	Robots	Algorithm	Input	Input	Explore procedures	Program writing		
	Patterns	Sequence	Output	Output	Refine procedures	Control mimics & devices		



Program	Debug	outcome	outcome	Variable	Sensors
Algorithm	Predict	Algorithm	Algorithm	Hardware & software	Measure input
Coding		Sequence instructions	Sequence	control	Create variables
Blocks		Sequence debugging	instructions	Change inputs	Link errors
Sprite		Repetition	Sequence debugging	Different outputs	Crumble controller,
Input		predict	Repetition	Articulate solutions	components, LED,
Output		Test & improve	predict	commands	Sparkle, crocodile clips,
Debug		Connected	Test & improve		connect, battery box,
Technology		commands	Connected		program, repetition,
		Sequence	commands		infinite loop, condition,
		programming	Sequence		True/ false, input/output
		design	programming		devices motor, selection,
			design		action,
					switch,
					task, design, evaluate

TECHNOLOGY IN OUR LIVES

Reception	YEAR I	Year 2	Year 3	Year 4	Year 5	Year 6
Technology	Purpose	Information sources	School network	Different networks	Computing devices	Information movement
Share	Online tools	Communication	Devices	Information	Internet parts	Connecting devices
Create	Communicate	Purposes	Computer parts	collection	Collaboration	Different audiences
Internet		Website content	Collaborate	Reliability	Responsibility	Research strategies
			Appropriate	Owners	Searching strategies	Search result rankings
			online communication	World Wide Web	Webpages	Acknowledge resources
			Search tools	Reliable & unreliable		
			Appropriate websites	content		
			Owner			
			Network			
			Internet			
			Search technology			
			Software			



						The second of the second
			Data			
			DATA HANDLII	NG		
Reception	Year I	Year 2	Year 3	Year 4	Year 5	Year 6
Collect	Photographs	Capturing moments	Questioning	Sensors	Spreadsheets	Generate
Set of photos	Video	Magnified images	Database	Data logger	Complex searches	Process
Count	Sound	Questions	Construct	Intervals	(and/or:)	Interpret
Organise	Data	Data collection	Contribute	Database creation	filter	Store
	Pictogram	Graphs	Recording data	Database searches	Problem solving	Appropriate data tool
	Digitally	Charts	Present data	Inaccurate data	Present answers	Interrogate
		Save	Branching database		Analyse information	_
		Retrieve	Tree structure		Question data	evaluate,
					Interpret	share
						Spreadsheet
						data heading data set
						cell
						columns and rows
						data item
						data set spreadsheet
						application format
						common attribute
						Formula, calculation
						operation formula
						range
						Duplicate
						sigma
						Propose question



						Graph, chart
						Citat C
		DIGI	TAL LITERACY			
Reception	Year I	Year 2	Year 3	Year 4	Year 5	Year 6
Choices Internet Website	Online Safety Rules Online Private information Email	Appropriate/inappropriate sites Cyber-bullying Digital footprint Keyword searching	Online safety rules Secure passwords Report abuse button Gaming Blogs	Secure passwords Report abuse button Gaming Blogs online social environments	Responsible online communication Informed choices Virus threats Blogs Messaging	Responsible online communication Informed choices Virus threats Screen grab URL PEGI Digital personality Messaging Scams Fishing
						Influence Opinion/ facts Manipulation persuasion