



Progression in Computing at St Michael's CE Primary School



COMPUTING

National Curriculum Expectations

Purpose of Study

A high-quality computing education equips pupils to use computational thinking and creativity to understand and change the world. Computing has deep links with mathematics, science, and design and technology, and provides insights into both natural and artificial systems. The core of computing is computer science, in which pupils are taught the principles of information and computation, how digital systems work, and how to put this knowledge to use through programming. Building on this knowledge and understanding, pupils are equipped to use information technology to create programs, systems and a range of content. Computing also ensures that pupils become digitally literate – able to use, and express themselves and develop their ideas through, information and communication technology – at a level suitable for the future workplace and as active participants in a digital world.

Aims

- The national curriculum for computing aims to ensure that all pupils:
 - can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation
 - can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems
 - can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems
 - are responsible, competent, confident and creative users of information and communication technology.



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Statutory and Non-Statutory Frameworks:

EYFS		KS1		LKS2		UKS2	
Nursery	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<p>Development Matters:</p> <p>PSED</p> <ul style="list-style-type: none"> Remember rules without needing an adult to remind them. <p>PD</p> <ul style="list-style-type: none"> Match their developing physical skills to tasks and activities in the setting. <p>UW</p> <ul style="list-style-type: none"> Explore how things work. 	<p>Development Matters:</p> <p>PSED</p> <ul style="list-style-type: none"> Show resilience and perseverance in the face of a challenge. Know and talk about the different factors that support their overall health and wellbeing: - sensible amounts of 'screen time'. <p>PD</p> <ul style="list-style-type: none"> Develop their small motor skills so that they can use a range of tools competently, safely and confidently. 	<p>National Curriculum</p> <p>Pupils should be taught to:</p> <ul style="list-style-type: none"> understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions create and debug simple programs use logical reasoning to predict the behaviour of simple programs use technology purposefully to create, organise, store, manipulate and retrieve digital content recognise common uses of information technology beyond school use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact 		<p>National Curriculum</p> <p>Pupils should be taught to:</p> <ul style="list-style-type: none"> design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts use sequence, selection, and repetition in programs; work with variables and various forms of input and output use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact. 			



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	<p>EAD</p> <ul style="list-style-type: none">• Explore, use and refine a variety of artistic effects to express their ideas and feelings.	<p>on the internet or other online technologies.</p>	
<p>Statutory Framework for the early years foundation stage</p> <p>ELG:</p> <p>PSED</p> <ul style="list-style-type: none">• Be confident to try new activities and show independence, resilience and perseverance in the face of challenge.• Explain the reasons for rules, know right from wrong and try to behave accordingly. <p>EAD</p> <ul style="list-style-type: none">• Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.			



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Our computing curriculum recognises that pupils are living in a rapidly changing world in which computing is playing an ever-increasing role. We aim to equip children with the resilience and skills to adapt to new technology and give them confidence to use computing for a variety of purposes. Children understand they must behave responsibly online and respect e-safety rules.



Big Ideas

Computer Science:

We learn the principle of information and computation, how digital systems work and how to put this knowledge to use through programming.

Information Technology:

We learn to create programs, systems and a range of content safely.

Digital Literacy:

We learn how to use, express ourselves and develop ideas safely, through information and communication.

‘Alan Turing gave us a mathematical model of digital computing that has completely withstood the test of time. He gave us very, very clear description that was truly prophetic.’

George Dyson (Scientific historian)



Links with other subjects

- Maths
- handling data
- Science
- Natural and artificial systems
- DT
- Programming, computer aided design

Pedagogy

- Low stakes quizzing for long term memory
- Varied teaching and learning activities
- Thoughtful sequencing of content
- Specific teaching of vocabulary
- Higher order thinking tasks

Progress

- Units of work are carefully sequenced so prior knowledge and concepts are built upon
- Regular formative assessment and assessment for learning (including low-stakes quizzing) ensures gaps are filled
- Effective questioning and higher order thinking features in every lesson
- Progress and attainment within units is recorded and shared with all teaching staff
- Opportunities are provided for revisiting content or applying learning at greater depth.

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Long term plan over a 2-year cycle:

September 2024 then 2026

	Aut 1	Aut 2	Spr 1	Spr 2	Sum 1	Sum 2
EYFS	Algorithmic thinking Keyboard and mouse skills		Being a robot Mouse skills in games		Intro to coding Kodable Handling data	
KS1	Computing systems and networks – Technology around us Keyboard and mouse skills	Creating media – Digital photography (RE, Geog, Art)	Creating media – Digital writing Changing Text (J2e – JiT - write)(RE)	Data and information – Pictograms (J2e – JiT - pictogram) (Sci/DT)	Programming A – Moving a robot (Beebot / Blue bot and APP)	Programming B – An introduction to quizzes (Scratch jr app)
LKS2	Computing systems and networks – Connecting computers Input and output - connects, networks and Wi-Fi	Creating media – Audio editing Audacity	Creating media – Desktop publishing Publisher or adobe spark or Picollage (also APP) (Hist/Art)	Data and information – Data logging Arduio Science Journal app (Sci)	Programming A – Sequence in music Scratch or J2code	Programming B – Repetition in games Scratch or J2code
UKS2	Computing systems and networks – Sharing information Systems and devices	Computing systems and networks – Communication World Wide Web Google, Bing, Yahoo!, Swisscows, DuckDuckGo, refine (Geog)	Creating media – Video editing Youtube and webcams	Data and information – Spreadsheets Excel and Google Sheets Chocolate (Hist/DT)	Programming A – Selection in physical computing Lego wedo or ozobot	Programming B – Sensing Scratch and review of programming or J2code



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September 2023 then 2025

	Aut 1	Aut 2	Spr 1	Spr 2	Sum 1	Sum 2
EYFS	Free play with beebots and programmable toys Whole class use of the Internet		Beebot commands Independent use of digital cameras / devices		Intro to coding Kodable Creating an pictures using a computer	
KS1	Computing systems and networks – IT around us How IT improves our world	Creating media – Digital painting (J2e – JiT - paint)	Creating media – Making music Song Maker	Data and information – Grouping data	Programming A – Robot algorithms (Beebots / Blue bots and J2e – JiT – Turtle)	Programming B – Introduction to animation (J2e – JiT - animate)
LKS2	Computing systems and networks – The Internet Input and output - connects, networks and Wi-Fi	Creating media – Animation Stop-frame animation (iMotion / Stop Motion Studio) (Art)	Creating media – Photo editing getpaint.net/ (Spanish/Art)	Data and information – Branching databases (J2e – JiT - branch) (Sci)	Programming A – Repetition in shapes turtleacademy.com or Scratch or J2code	Programming B – Events and actions (Scratch jr app) or J2code
UKS2	Computing systems and networks – Communication Searching the web (Geog)	Creating media – Vector drawing Google Drawings	Creating media – Web page creation Wix	Data and information – Flat-file databases (J2data) (Science)	Programming A – Variables in games Scratch or J2code	Programming B – Selection in quizzes Scratch or J2code

<https://teachcomputing.org/> EYFS – separate source



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Skills Progression	EYFS	Key Stage 1		Lower Key Stage 2		Upper Key Stage 2	
Information Technology: Word Processing/ Typing	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • 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. 					
Information Technology: Photography and Digital Art		<ul style="list-style-type: none"> • 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. 	I can edit a photo (crop, filters, mark up etc) <ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • I can confidently take and manipulate photos • I can create a digital image using a range of tools, pens, brushes and effects 	<ul style="list-style-type: none"> • I can enhance digital images and photographs using crop, brightness, contrast & resize • I can manipulate shapes to create digital art 		
Information Technology: Data Handling	I can identify a chart. <ul style="list-style-type: none"> • I can sort physical objects, take a picture and discuss what I have done. • I can present simple data on a digital device 	<ul style="list-style-type: none"> • I can sort images or text into two or more categories on a digital device. • I can collect data on a topic. 	<ul style="list-style-type: none"> • I can sort digital objects into a range of charts such as Venn diagrams, Carroll diagrams and bar charts using different 	<ul style="list-style-type: none"> • I can create my own sorting diagram and complete a data handling activity with it using images and text. 	<ul style="list-style-type: none"> • I can create my own online multiple choice questionnaire. • I can input data into a spreadsheet and export 	<ul style="list-style-type: none"> • I can create and publish my own online questionnaire and analyse the results. • I can use simple formulae to solve 	



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Skills Progression	EYFS	Key Stage 1		Lower Key Stage 2		Upper Key Stage 2	
		<ul style="list-style-type: none"> • I can create a tally chart and pictogram. • I can record myself explaining what I have done and what it shows me. 	apps and software. <ul style="list-style-type: none"> • I can orally record myself explaining what the data shows me. • I can create a branching database using questions 	<ul style="list-style-type: none"> • I can start to input simple data into a spreadsheet. • I can create a feelings chart exploring a story or character's feelings. 	the data in a variety of ways: charts, bar charts, pie charts. <ul style="list-style-type: none"> • I understand how data is collected 	calculations including =sum and other statistical functions <ul style="list-style-type: none"> • I can edit and format difference cells in a spreadsheet 	
Information Technology: Presentations, web design and eBook Creation				I can create an interactive comic with sounds, formatted text and video. <ul style="list-style-type: none"> • I can annotate an image with videos • I can create a simple web page. 			I can create a web site which includes a variety of media. <ul style="list-style-type: none"> • 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: Animation				I can create animations of faces to speak in role with more life-like realistic outcomes. <ul style="list-style-type: none"> • I can improve stop motion animation clips 			



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Skills Progression	EYFS	Key Stage 1		Lower Key Stage 2		Upper Key Stage 2	
				with techniques like onion skinning. • I can use animation tools in presenting software to create simple animations.			
Information Technology: Video Creation						I can use cutaway and split screen tools in iMovie. • 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	I can use the green screen masking tool with more than one character. • I can use picture in picture tools in iMovie. • 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: Sound			• Create a musical composition using software • I can record my own sound effects. • I can record my voice over a		Edit sound effects for a purpose. • Create a simple four chord song following the correct rhythm. • I can record a radio broadcast or audiobook		



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Skills Progression	EYFS	Key Stage 1		Lower Key Stage 2		Upper Key Stage 2	
			compositions to perform a song				
Computer Science: Computational Thinking	I can follow simple oral algorithms <ul style="list-style-type: none"> I can spot simple patterns I can sequence simple familiar tasks 	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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: Daisy the Dino) I can debug algorithms 	I can create algorithms for use when programming <ul style="list-style-type: none"> 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 	I can use abstraction to focus on what's important in my design <ul style="list-style-type: none"> 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 <ul style="list-style-type: none"> 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 	I can recognise, and make use, of patterns across programming projects <ul style="list-style-type: none"> 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 and Programing	I can use a mouse, touch screen or appropriate access device to target and select options on screen <ul style="list-style-type: none"> I can input a simple sequence of commands to control a digital device with support (Bee Bot) 	I can create a simple program e.g. sequence of instructions for a Bee Bot <ul style="list-style-type: none"> I can use sequence in programs I can 	I understand programs execute by following precise and unambiguous instructions <ul style="list-style-type: none"> I can create programs on a variety of digital devices 	I can design and create programs <ul style="list-style-type: none"> I can write programs that accomplish specific goals I can use repetition in programs I can 	<ul style="list-style-type: none"> I can use simple selection in programs I can work with various forms of output I can use logical reasoning to systematically detect and correct errors in programs 	I can create programs by decomposing them into smaller parts <ul style="list-style-type: none"> I can use selection in programs I can use conditions in repetition commands 	I can use a range of sequence, selection and repetition commands combined with variables as required to implement my design



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		locate and fix bugs in my program <ul style="list-style-type: none"> • I can debug programs of increasing complexity • I can use logical reasoning to predict the outcome of simple programs 	work with various forms of input <ul style="list-style-type: none"> • I can work with various forms of output 	<ul style="list-style-type: none"> • I can work with variables • I can create programs that control or simulate physical systems • I can evaluate my work and identify errors 	<ul style="list-style-type: none"> • 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 only)			<ul style="list-style-type: none"> • 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) 	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • 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: Self-Image and Identity to be covered once	I can recognise that I can say 'no' / 'please stop' / 'I'll tell' / 'I'll ask' to somebody who asks	<ul style="list-style-type: none"> • I can recognise that there may be people online who could make me feel sad, embarrassed or upset. 	I can explain what is meant by the term 'identity'. <ul style="list-style-type: none"> • I can explain how I can represent myself in different ways online. 	<ul style="list-style-type: none"> • 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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Skills Progression	EYFS	Key Stage 1	Lower Key Stage 2	Upper Key Stage 2
<p>per term/ half-term in Computing lesson</p> <p><i>Project Evolve</i></p>	<p>me to do something that makes me feel sad, embarrassed or upset.</p> <ul style="list-style-type: none"> I can explain how this could be either in real life or online 	<ul style="list-style-type: none"> 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 I can explain how other people's identity online can be different to their identity in real life. I can describe ways in which people might make themselves look different online. I can give examples of issues online that might make me feel sad, worried, uncomfortable or frightened; I can give examples of how I might get help 	<ul style="list-style-type: none"> I can explain ways in which and why I might change my identity depending on what I am doing online (e.g. gaming; using an avatar; social media I can explain how my online identity can be different to the identity I present in 'real life' Knowing this, I can describe the right decisions about how I interact with others and how others perceive me 	<p>I can describe ways in which media can shape ideas about gender.</p> <ul style="list-style-type: none"> I can identify messages about gender roles and make judgements based on them. I can challenge and explain why it is important to reject inappropriate messages about gender online. I can describe issues online that might make me or others feel sad, worried, uncomfortable or frightened. I know and can give examples of how I might get help, both on and offline. I can explain why I should keep asking until I get the help I need
<p>Digital Literacy (achieved through PSHE)</p> <p><i>Project Evolve</i></p>	<ul style="list-style-type: none"> I can recognise that I can say 'no' / 'please stop' / 'I'll tell' / 'I'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 (PSHE Aut1) 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. 	<ul style="list-style-type: none"> I can use the internet with adult support to communicate with people I know. I can explain why it is important to be considerate and kind to people Online I can use the internet to communicate with people I don't know well (e.g. email a penpal in another school/ country). I can give examples of how I might use technology to communicate with others I don't know well I can describe how to behave online in ways that do not upset others and can give examples I can give examples of bullying behaviour and how it could look online. 	<ul style="list-style-type: none"> I can describe ways people who have similar likes and interests can get together online. I can give examples of technology-specific forms of communication (e.g. emojis, acronyms, text speak). I can explain some risks of communicating online with others I don't know well. I can explain how my and other people's feelings can be hurt by what is said or written online. I can explain why I should be careful who I trust online and what information I can trust them with. I can explain why I can take back my trust in someone or something if I feel nervous, uncomfortable or worried. 	<p>I can search for information about an individual online and create a summary report of the information I find.</p> <ul style="list-style-type: none"> I can describe ways that information about people online can be used by others to make judgments about an individual 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 make positive contributions and be part of online communities. I can describe some of the communities in which I am involved and describe how I collaborate with others positively <p>(PSHE, Aut, A)</p>



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Skills Progression	EYFS	Key Stage 1	Lower Key Stage 2	Upper Key Stage 2
	<ul style="list-style-type: none"> I can give simple examples of how to find information (e.g. search engine, voice activated searching). (PSHE Spr) <p>I can identify rules that help keep us safe and healthy in and beyond the home when using technology.</p> <ul style="list-style-type: none"> I can give some simple examples I can recognise some ways in which the internet can be used to communicate. (PSHE Sum1) I can give examples of how I (might) use technology to communicate with people I know. (PSHE Sum2) 	<ul style="list-style-type: none"> I understand how bullying can make someone feel. I can talk about how someone can/would get help about being bullied online or offline. <p>I can recognise that information can stay online and could be copied.</p> <ul style="list-style-type: none"> I can describe what information I should not put online without asking a trusted adult first <p>I can explain how information put online about me can last for a long time.</p> <ul style="list-style-type: none"> I know who to talk to if I think someone has made a mistake about putting something online. (PSHE, Aut2 A) <p>I can use the internet to find things out.</p> <ul style="list-style-type: none"> I can use simple keywords in search engines I can describe and demonstrate how to get help from a trusted adult or helpline if I find content that makes me feel sad, uncomfortable worried or frightened. <p>I can use keywords in search engines.</p> <ul style="list-style-type: none"> I 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 (e.g. Alexa, Google Now, Siri). I can explain the difference between things that are imaginary, 'made up' or 	<ul style="list-style-type: none"> I can explain what it means to 'know someone' online and why this might be different from knowing someone in real life. I can explain what is meant by 'trusting someone online'. I can explain why this is different from 'liking someone online' <p>I can search for information about myself online.</p> <ul style="list-style-type: none"> I can recognise I need to be careful before I share anything about myself or others online. I know who I should ask if I am not sure if I should put something online. <p>I can explain what bullying is and can describe how people may bully others.</p> <ul style="list-style-type: none"> I can describe rules about how to behave online and how I follow them. I can identify some online technologies where bullying might take place. I can describe ways people can be bullied through a range of media (e.g. image, video, text, chat). I can explain why I need to think carefully about how content I post might affect others, their feelings and how it may affect how others feel about them (their reputation) <p>(PSHE, Aut, A)</p> <p>I can use key phrases in search engines.</p> <ul style="list-style-type: none"> I can explain what autocomplete is and how to choose the best suggestion. 	<p>I can use different search technologies.</p> <ul style="list-style-type: none"> I can evaluate digital content and can explain how I make choices from search results. I can explain key concepts including: data, information, fact, opinion belief, true, false, valid, reliable and evidence. I understand the difference between online mis-information (inaccurate information distributed by accident) and dis-information (inaccurate information deliberately distributed and intended to mislead). 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 explain what is meant by a 'hoax'. I can explain why I need to think carefully before I forward anything online. I can explain why some information I find online may not be honest, accurate or legal. 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 either by accident or on purpose). (PSHE, Spr, A) <p>I can create and use strong and secure passwords.</p> <ul style="list-style-type: none"> I can explain how many free apps or services may read and share my private



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		<p>'make believe' and things that are 'true' or 'real'.</p> <ul style="list-style-type: none"> I can explain why some information I find online may not be true. (PSHE, Spr2 A) <p>I can recognise more detailed examples of information that is personal to me (e.g. where I live, my family's names, where I go to school).</p> <ul style="list-style-type: none"> I can explain why I should always ask a trusted adult before I share any information about myself online. I can explain how passwords can be used to protect information and devices. (PSHE, Sum2 A) <p>I can explain why work I create using technology belongs to me.</p> <ul style="list-style-type: none"> I can say why it belongs to me (e.g. 'it is my idea' or 'I designed it'). I can save my work so that others know it belongs to me (e.g. filename, name on content) <p>I can describe why other people's work belongs to them.</p> <ul style="list-style-type: none"> I can recognise that content on the internet may belong to other people. (PSHE Aut1, B) <p>I can explain how other people's identity online can be different to their identity in real life.</p> <ul style="list-style-type: none"> I can describe ways in which people might make themselves look different online. I can give examples of issues online that might make me feel sad, worried, 	<ul style="list-style-type: none"> 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' (PSHE, Spr, A) <p>I can explain why spending too much time using technology can sometimes have a negative impact on me; I can give some examples of activities where it is easy to spend a lot of time engaged (e.g. games, films, videos)</p> <p>I can explain how using technology can distract me from other things I might do or should be doing.</p> <ul style="list-style-type: none"> I can identify times or situations when I might need to limit the amount of time I use technology. I can suggest strategies to help me limit this time. (PSHE, Sum1,A) <p>I can describe strategies for safe and fun experiences in a range of online social environments</p> <ul style="list-style-type: none"> I can give examples of how to be respectful to others online <ul style="list-style-type: none"> I can describe how others can find out information about me by looking online. I can explain ways that some of the information about me online could have been created, copied or shared by others 	<p>information (e.g. friends, contacts, likes, images, videos, voice, messages, geolocation) with others.</p> <ul style="list-style-type: none"> I can explain how and why some apps may request or take payment for additional content (e.g. in-app purchases) and explain why I should seek permission from a trusted adult before purchasing <p>I can describe ways technology can affect healthy sleep and can describe some of the issues.</p> <ul style="list-style-type: none"> I can describe some strategies, tips or advice to promote healthy sleep with regards to technology (PSHE, Sum, A) <p>I can show I understand my responsibilities for the well-being of others in my online social group.</p> <ul style="list-style-type: none"> I can explain how impulsive and rash communications online may cause problems (e.g. flaming, content produced in live streaming). I can demonstrate how I would support others (including those who are having difficulties) online. I can demonstrate ways of reporting problems online for both myself and my friends <p>I can use search technologies effectively.</p> <ul style="list-style-type: none"> I can explain how search engines work and how results are selected and ranked.



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Skills Progression	EYFS	Key Stage 1	Lower Key Stage 2	Upper Key Stage 2
		<p>uncomfortable or frightened; I can give examples of how I might get help. (PSHE, Spr1, B)</p> <p>I can describe why other people's work belongs to them.</p> <ul style="list-style-type: none"> • I can recognise that content on the internet may belong to other people. (PSHE, Sum2, B) 	<p>I can give reasons why I should only share information with people I choose to and can trust. I can explain that if I am not sure or I feel pressured, I should ask a trusted adult.</p> <ul style="list-style-type: none"> • I understand and can give reasons why passwords are important. • I can describe simple strategies for creating and keeping passwords private. • I can describe how connected devices can collect and share my information with others. (PSHE, Aut, B) <p>I can analyse information and differentiate between 'opinions', 'beliefs' and 'facts'. I understand what criteria have to be met before something is a 'fact'.</p> <ul style="list-style-type: none"> • I can describe how I can search for information within a wide group of technologies (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 that some people I 'meet online' (e.g. through social media) may be computer programmes pretending to be real people. • can explain why lots of people sharing the same opinions or beliefs online does not make those opinions or beliefs true 	<ul style="list-style-type: none"> • I can demonstrate the strategies I would apply to be discerning in evaluating digital content. • 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'. I can define the terms 'influence', 'manipulation' and 'persuasion' and explain how I might encounter these online (e.g. advertising and 'ad targeting'). • I can demonstrate strategies to enable me to analyse and evaluate the validity of 'facts' and I can explain why using these strategies are important. • I can identify, flag and report inappropriate content (PSHE, Aut, B) <p>I can explain how I am developing an online reputation which will allow other people to form an opinion of me.</p> <ul style="list-style-type: none"> • I can describe some simple ways that help build a positive online reputation <p>I can recognise when someone is upset, hurt or angry online.</p> <ul style="list-style-type: none"> • I can describe how to get help for someone that is being bullied online and assess when I need to do or say something or tell someone. • I can explain how to block abusive users. • I can explain how I would report online bullying on the apps and platforms



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Skills Progression	EYFS	Key Stage 1	Lower Key Stage 2	Upper Key Stage 2
			(PSHE, Spr, B)	<p>that I use.</p> <ul style="list-style-type: none">• I can describe the helpline services who can support me and what I would say and do if I needed their help (e.g. Childline) <p>I can use search technologies effectively.</p> <ul style="list-style-type: none">• I can explain how search engines work and how results are selected and ranked.• I can demonstrate the strategies I would apply to be discerning in evaluating digital content.• 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'. I can define the terms 'influence', 'manipulation' and 'persuasion' and explain how I might encounter these online (e.g. advertising and 'ad targeting').• I can demonstrate strategies to enable me to analyse and evaluate the validity of 'facts' and I can explain why using these strategies are important.• I can identify, flag and report inappropriate content <p>(PSHE, Spr, B)</p> <p>I can describe common systems that regulate age-related content (e.g. PEGI, BBFC, parental warnings) and describe their purpose.</p> <ul style="list-style-type: none">• I can assess and action different strategies to limit the impact of



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Skills Progression	EYFS	Key Stage 1	Lower Key Stage 2	Upper Key Stage 2
				<p>technology on my health (e.g. nightshift mode, regular breaks, correct posture, sleep, diet and exercise).</p> <ul style="list-style-type: none">• I can explain the importance of selfregulating my use of technology; I can demonstrate the strategies I use to do this (e.g. monitoring my time online, avoiding accidents). <p>I use different passwords for a range of online services.</p> <ul style="list-style-type: none">• I can describe effective strategies for managing those passwords (e.g. password managers, acronyms, stories).• I know what to do if my password is lost or stolen.• I can explain what app permissions are and can give some examples from the technology or services I use.• 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,



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PSHE Long Term Plans to support Digital Literacy – highlighted topics cover Computing curriculum. Use resources from Project Evolve <https://projectevolve.co.uk/> to support teaching.

September 2020 and then September 2022

	Aut 1		Aut 2		Spr 1		Spr 2		Sum 1		Sum 2	
	Relationships				Living in the wider world				Health and Wellbeing			
	Families and friendships	Safe relationships	Respecting ourselves and others	Belonging to a community	Media literacy and digital resilience	Money and work	Physical health and Mental wellbeing	Growing and changing	Keeping safe			
EYFS	Select and use activities and resources Play with others Seeing myself as a valuable individual Build constructive friendships (Art) Express feelings				Develop sense of responsibility and community Think about perspectives of others				Show more confidence Follow rules Talk about feelings Show resilience Identify and moderate own feelings Manage own needs			
KS1	Roles of different people; families; feeling cared for	Managing secrets; resisting pressure and getting help; recognising hurtful behaviour	How behaviour affects others; being polite and respectful	What rules are; caring for others' needs; looking after the environment	The internet in everyday life; online content and information	Strengths and interests; jobs in the community	Keeping healthy; food and exercise, hygiene routines; sun safety	Growing older; naming body parts; moving class or year	How rules and age restrictions help us; keeping safe online			
LKS2	What makes a family; features of family life	Responding to hurtful behaviour; managing confidentiality; recognising risks online	Recognising respectful behaviour; the importance of self-respect; courtesy and being polite	The value of rules and laws; rights, freedoms and responsibilities	How data is shared and used	Different jobs and skills; job stereotypes; setting personal goals	Health choices and habits; what affects feelings; expressing feelings	Physical and emotional changes in puberty; external genitalia; personal hygiene routines; support with puberty	Risks and hazards; safety in the local environment and unfamiliar places			
UKS2	Managing friendships and peer influence	Recognising and managing pressure; consent in different situations	Responding respectfully to a wide range of people; recognising prejudice and discrimination	Protecting the environment; compassion towards others	Evaluating media sources; sharing things online	Identifying job interests and aspirations; what influences career choices; workplace stereotypes	Healthy sleep habits; sun safety; medicines, vaccinations, immunisations and allergies	Human reproduction and birth; increasing independence; managing transition	Keeping safe in different situations, including responding in emergencies, first aid and FGM			



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September 2021 and then 2023

	Aut 1		Aut 2		Spr 1		Spr 2		Sum 1		Sum 2	
	Relationships				Living in the wider world				Health and Wellbeing			
	Families and friendships	Safe relationships	Respecting ourselves and others	Belonging to a community	Media literacy and digital resilience	Money and work	Physical health and Mental wellbeing	Growing and changing	Keeping safe			
EYFS	Select and use activities and resources Play with others Seeing myself as a valuable individual (Art) Build constructive friendships Express feelings				Develop sense of responsibility and community Think about perspectives of others				Show more confidence Follow rules Talk about feelings Show resilience Identify and moderate own feelings Manage own needs			
KS1	Making friends; feeling lonely and getting help	Recognising privacy; staying safe; seeking permission	Recognising things in common and differences; playing and working cooperatively; sharing opinions	Belonging to a group; roles and responsibilities; being the same and different in the community	The internet in everyday life; online content and information	Different jobs and skills; job stereotypes; setting personal goals	Why sleep is important; medicines and keeping healthy; keeping teeth healthy; managing feelings and asking for help	Growing older; naming body parts; moving class or year	Safety in different environments; risk and safety at home; emergencies			
LKS2	Positive friendships, including online	Personal boundaries; safely responding to others; the impact of hurtful behaviour	Respecting differences and similarities; discussing difference sensitively	What makes a community; shared responsibilities	How the internet is used; assessing information online	Making decisions about money; using and keeping money safe	Maintaining a balanced lifestyle; oral hygiene and dental care	Personal strengths and achievements; managing and reframing setbacks	Medicines and household products; drugs common to everyday life			
UKS2	Attraction to others; romantic relationships; civil partnership and marriage	Physical contact and feeling safe	Expressing opinions and respecting other points of view, including discussing topical issues	Valuing diversity; challenging discrimination and stereotypes	How information online is targeted; different media types, their role and impact	Influences and attitudes to money; money and financial risks	What affects mental health and ways to take care of it; managing change, loss and bereavement; managing time online	Personal identity; recognising individuality and different qualities; mental wellbeing	Keeping personal information safe; regulations and choices; drug use and the law; drug use and the media			



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Promoting SMSC and British Values in Computing

Spiritual	Moral	Social	Cultural
<ul style="list-style-type: none"> • Online Interactions—E-Safety • Respect others and themselves. • Values, principles and beliefs. • Understanding feelings, emotions and impact. • An appreciation of the intangible 	<ul style="list-style-type: none"> • E-Safety / Online. • Collaborative working—respect (coding, making films). • Respect for others' feelings. 	<ul style="list-style-type: none"> • E-Safety / Online. • Working collaboratively on projects. • Appreciate rights and responsibilities. 	<ul style="list-style-type: none"> • Online interactions—E-Safety. • Using range of cultural pics/names etc for creating publishing. • Use language & understand images / icons.

Democracy	The Rule of Law	Individual Liberty	Respect	Tolerance of those with different faiths
<ul style="list-style-type: none"> ○ In computing we are learning to understand and be considerate to the views of other internet users. ○ We understand that we are each part of the democracy of the internet and that we can each, in our own small way, affect the way the internet exists. 	<ul style="list-style-type: none"> ○ In computing we understand the use of rules on computers and the internet, such as when we are allowed to use social media and what we are allowed to post and share. ○ We understand that rules are to keep others and ourselves safe and to help the internet to be an enjoyable and engaging place. 	<ul style="list-style-type: none"> ○ In computing we understand how to use our right to freedom of speech in a respectable and thoughtful way, being considerate of how this speech will affect others. ○ We understand the freedom the internet and computers offer us in discovering information and connecting us with the world. 	<ul style="list-style-type: none"> ○ In computing we appreciate and understand the views of others, our right to challenge, question and discuss opinions and views, and to do this in a respectable and thoughtful way. ○ We understand that as we are connected with the world while accessing the internet, we are exposed to the widest range of views, 	<ul style="list-style-type: none"> ○ In computing we understand that we are connected to people across the whole world. We understand that these are people from different communities, cultures, faiths and beliefs. ○ We use the opportunities offered in computing to question, challenge and understand people with these different characteristics to



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			and we are learning to respect them.	support and develop our tolerance of them.
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