Oxbridge Lane Primary School

Computing Curriculum Overview

	Information Technology	Computer Science	Digital Literacy/Online Safety
	➢ Word Processing/Typing ➢ Data Handling ➢ Presentations, web design and eBook Creation ➢ Animation ➢ Video Creation ➢ Photography and Digital Art ➢ Augmented Reality and Virtual Reality ➢ Sound	➢ Computational Thinking ➢ Programming ➢ Computer Networks	➢ Self-Image and Identity ➢ Online Relationships ➢ Online Reputation ➢ Online Bullying ➢ Managing Online Information ➢ Health, Wellbeing and Lifestyle ➢ Privacy and Security ➢ Copyright and Ownership
Rationale	Information technology provides an invaluable tool to support both teaching and learning. Pupil's develop transferable skills enabling them to adapt in an ever changing and technology rich environment. The teaching of information technology will give pupils the skills to present information in a motivating and exciting ways.	In today's digital world, computer science is a critical aspect of the computing curriculum that offers opportunities for children both academically and technologically. At Oxbridge Lane we want our children to leave with a foundation of computing skills to support them in their future roles in society.	Digital literacy is an important entitlement for all children. It provides children with the skills, knowledge and understanding that will help them to take a full and active part in social, cultural, economic, civic and intellectual life now and in the future. They will gain the ability to make and share their thoughts and ideas in different modes and format, enabling them to create, collaborate and communicate effectively and to understand how and when digital technologies can best be used to support these processes.

Nursery	Children use iPads, touch screen IWB and Beebots in an exploratory capacity with support from adults and age/subject appropriate activities within areas of the EYFS curriculum. **Support Scaffold –** Given to pupils on a small group basis within classroom environment. Discussions with parents/carers regarding age appropriate content and use screen time. Promotion of computational thinking throughout classroom activities.		
Reception	**Autumn**	**Spring**	**Summer**
	Skills – Children recognise: • To program Beebots to make simple journeys. • How to work together to solve problems. • How to recognise a pattern.	**Skills** – Children recognise: • How to work together to solve problems. • How to recognise simple algorithms. • That trying different approaches can help identify the best one. • How to sequence items	**Skills** – Children recognise: • How objects are similar and how they are different. • How to test their algorithms and recognise problems.

	Knowledge – • What information is important in a task and what can be ignored? • Why is it better to do some task in real life or online? • What are the patterns? • How do you programme a Bee-Bot?	**Knowledge –** • What different approaches can I use to solve a problem? • What is a simple algorithm and how is it created? • What is the sequence of items?	**Knowledge –** • What are the similarities and differences in my project? • What patterns can I make? • What is good and what can be improved with an algorithm?
Mastery	Children to apply acquired skills into to other aspects of curriculum within the EYFS environment, use Barefoot computing activities to help computational thinking. Use EVOLVE for support with the application of online safety.		
Cultural Capital	**Linking Computing to subject areas** **Online Safety**	SPARK Tees Valley https://www.sparkteesvalley.com/my-login?action=auth&key=4f5172135ff9292713d154825f45be2b Primary Computing https://www.computingatschool.org.uk/resource-library/primary-computing STEM Teaching https://www.stem.org.uk/primary Discovery Education https://app.discoveryeducation.co.uk/learn/signin?next=https%3A%2F%2Fapp.discoveryeducation.co.uk%2Fsuite MrPICT https://www.mrpict.com/ Barefoot computing: https://www.barefootcomputing.org/ Childline https://www.childline.org.uk/info-advice/bullying-abuse-safety/online-mobile-safety/staying-safe-online/?scrlybrkr=90f01810 CEOP https://www.thinkuknow.co.uk/parents/jessie-and-friends-videos/ National Online Safety https://nationalonlinesafety.com/ Online Safety UK https://www.onlinesafetyuk.com/?gclid=EAIaIQobChMItJqEqLjq_QIV2IBQBh3pngKpEAAYASAAEgLI5PD_BwE Internet Matters https://www.internetmatters.org/schools-esafety/primary/ SFGfl https://swgfl.org.uk/online-safety/	
Scaffolding / Support	**Things to consider and adapt to support learners:** • **Font size** • **Pictorial instructions** • **Now and then steps** • **Allow pupils different ways to share their work through typed, photographs, videos and voice recordings** • **Scaffolds that support the topic/program**		

	Autumn Computing systems and networks Creating media	**Spring** Programming Data and information	**Summer** Creating media Programming
Year 1	**Skills –** Children: • To develop and demonstrate basic keyboard and mouse skills. • To use paint programs to create pictures and writing.	**Skills –** Children • To use simple algorithms and programs. • To design and create a simple program. • To log on a computer and save a document.	**Skills –** Children • To use word programs to create digital writing. • To program sprites in ScratchJr.

	Knowledge – • What is a computer and its main parts? • How can a mouse be used in different ways? • How do you use a keyboard to type and edit? • What are the rules for using technology responsibly? • What do different tools do in paint programs? • What choices are made when creating a digital painting? • How are digital pictures created? • What are the similarities and differences between a digital and physical painting?	**Knowledge –** • What do different commands do? • How can the four direction commands be combined to make a sequence? • What are possible solutions to a problem? • What objects can be counted? • How can an object (teacher chosen) be described? • What are the similarities and differences between different groups? • What does information tell you about the group?	**Knowledge –** • What choices are made when changing text? • What do different tools do and why are they used? • What are the similarities and differences between typing and writing? • Which command is needed for different purposes? • What happens when a series of commands are joined? • What is the effect of changing a value? • How are projects designed and created?
Project Evolve (Online Safety)	**Health Wellbeing and Lifestyle.** To explain rules to keep safe when using technology both in and beyond the home	**Self-image, identity and online bullying** To recognise that there may be people online who could make someone feel sad, embarrassed or upset. To give examples of when and how to speak to an adult if they feel sad, upset or uncomfortable online and how they can help To describe how to behave online in ways that do not upset others and can give examples.	**Privacy and Security** To explain how passwords are used to protect information, accounts and devices.
Mastery	Children begin to apply these skills across different programmes and within different curriculum subjects. Refer to https://teachcomputing.org/curriculum/key-stage-1 for teaching resources linked to above and EVOLVE for support with the application of online safety.		
Key vocabulary	digital, physical, technology, programs, tools, edit, colour, word processor, font, format, typing, object, search, , property, value, data set, commands, instructions, directions, algorithm, design, predict, effect, change.		
Cultural Capital	**Linking Computing to subject areas** **Online Safety**	SPARK Tees Valley https://www.sparkteesvalley.com/my-login?action=auth&key=4f5172135ff9292713d154825f45be2b Primary Computing https://www.computingatschool.org.uk/resource-library/primary-computing STEM Teaching https://www.stem.org.uk/primary Discovery Education https://app.discoveryeducation.co.uk/learn/signin?next=https%3A%2F%2Fapp.discoveryeducation.co.uk%2Fsuite MrPICT https://www.mrpict.com/ Childline https://www.childline.org.uk/info-advice/bullying-abuse-safety/online-mobile-safety/staying-safe-online/?scrlybrkr=90f01810 CEOP https://www.thinkuknow.co.uk/parents/jessie-and-friends-videos/ National Online Safety https://nationalonlinesafety.com/ Online Safety UK https://www.onlinesafetyuk.com/?gclid=EAIaIQobChMItJqEqLjq_QIV2IBQBh3pngKpEAAYASAAEgLI5PD_BwE Internet Matters https://www.internetmatters.org/schools-esafety/primary/ SFGfl https://swgfl.org.uk/online-safety/	
Scaffolding / Support	**Things to consider and adapt to support learners:** • **Font size** • **Pictorial instructions based on the program the child will be using** • **Now and then steps** • **Allow pupils different ways to share their work through typed, photographs, videos and voice recordings** • **Scaffolds that support the topic/program**		

	Autumn Information Technology around us Creating Media	**Spring** Programming Data and Information	**Summer** Creating Media Programming
Year 2	**Skills -** • To demonstrate how to access Microsoft PowerPoint. • To create a digital photograph.	**Skills –** • To use algorithms to help with planning programs. • To present data in groups visually in charts or graphs.	**Skills –** • To create, edit and improve digital music. • To design and program a quiz in ScratchJr.

	Knowledge – • What are the uses and features of information technology? • Where is Information Technology located outside of the classroom? • How does information technology help us? • What choices are made when using information technology? • What is the guidance for using technology in different environments and settings e.g. accessing online technologies in public places and the home environment? • How do rules / guides help anyone accessing online technologies? • What is a digital photograph and how are they taken? • What device is needed to take a digital photograph? • What makes a good photograph and how can photographs can be improved? • Can photos be changed?	**Knowledge –** • What is a series of instructions called? • What happens when we change the order of instructions? • What might the outcome of a program be? • Can programming projects have code and artwork? • How are programs debugged? • What is the role of a tally chart? How can they be used? • Why do some charts use pictures? • How are pictograms created? • Why are some objects selected? • How can computers be used to present information?	**Knowledge –** • Are there patterns in music? • How can sound be created using a computer? • How are musical patterns created on a digital device? • What music is needed for different purposes? • How can work on the computer be reviewed and refined? • Does a sequence of commands have a start and an outcome? • How can a design be used to create a program? • How can a project can be improved?
Project Evolve (Online Safety)	**Health, Wellbeing and Lifestyle** To explain simple guidance for using technology in different environments and settings e.g. accessing online technologies in public places and the home environment and understand how those rules help people access technology.	**Self-image, identity and online bullying** To describe appropriate ways to behave towards other people online and why this is important	**Privacy and security** **To** describe and explain some rules for keeping personal information private (e.g. creating and protecting passwords).
Mastery	Children begin to apply these skills across different programmes and within different curriculum subjects. Refer to https://teachcomputing.org/curriculum/key-stage-1 for teaching resources linked to above and EVOLVE for support with the application of online safety.		
Key Vocabulary	Information Technology(IT), computer, barcode, scanner, digital, physical, music, pattern, device, flash, capture, portrait, framing, composure, focus, light source, editing, filter, organise, data, object, tally chart, votes, total, sharing, different, conclusion, votes, total, pictogram, attribute, block diagram, group, instruction, sequence, clear, unambiguous, algorithm, prediction, design, route, mat, debugging, decomposition, modify, code, run		
Cultural Capital	**Linking Computing to subject areas** **Online Safety**	SPARK Tees Valley https://www.sparkteesvalley.com/my-login?action=auth&key=4f5172135ff9292713d154825f45be2b Primary Computing https://www.computingatschool.org.uk/resource-library/primary-computing STEM Teaching https://www.stem.org.uk/primary Discovery Education https://app.discoveryeducation.co.uk/learn/signin?next=https%3A%2F%2Fapp.discoveryeducation.co.uk%2Fsuite MrPICT https://www.mrpict.com/ Childline https://www.childline.org.uk/info-advice/bullying-abuse-safety/online-mobile-safety/staying-safe-online/?scrlybrkr=90f01810 CEOP https://www.thinkuknow.co.uk/parents/jessie-and-friends-videos/ National Online Safety https://nationalonlinesafety.com/ Online Safety UK https://www.onlinesafetyuk.com/?gclid=EAIaIQobChMItJqEqLjq_QIV2IBQBh3pnqKpEAAYASAAEgLI5PD_BwE Internet Matters https://www.internetmatters.org/schools-esafety/primary/ SFGfl https://swgfl.org.uk/online-safety/	

Scaffolding / Support	**Things to consider and adapt to support learners:** • **Font size** • **Pictorial instructions based on the program the child will be using** • **Now and then steps** • **Allow pupils different ways to share their work through typed, photographs, videos and voice recordings** • **Scaffolds that support the topic/program**

	Autumn Computing systems and networks Creating media	**Spring** Programming Data and information	**Summer** Creating media Programming
Year 3	**Skills** • To design a digital device. • To design, produce and evaluate a stop-frame animation.	**Skills** • To identify, design, create, test and evaluate a sequence of sounds. • To present and record data using branching databases	**Skills** • To use desktop publishing to create and edit pictures and texts • To program sprites in Scratch to change size and the colour of lines.
	Knowledge – • How do digital devices function? • What are input and output devices? • How can digital devices change the way that we work? • How are digital devices connected? • What are the physical components of a network? • What is an animation? • How does animated movement relate with a sequence of images? • How are animations made, reviewed, edited and improved?	**Knowledge –** • Do commands have an outcome? • What is the sequence of commands? Do they have an order? • How can a description be used to create and edit a project? • What is a branching database and how are they made? • What are real-world uses of branching databases?	**Knowledge –** • How do text and images convey information? • How can text and layout can be edited? • How is content added to a desktop publishing publication? • How do different layouts suit different purposes? • What are the the benefits of desktop publishing? • How do sprites programmed to move in all four directions? • How are programs adapted and developed to a new context? • How are bugs identified and fixed? • How are maze-based challenges designed and created?
Project Evolve (Online Safety)	**Health, Wellbeing and Lifestyle** • To explain why spending too much time using technology can sometimes have a negative impact on anyone. • To explain why some online activities, have age restrictions and why it is important to follow them.	**Self-image, identity and online bullying** • To identify why people may change their identity online. And recognise how to behave online and how to support someone experiencing online bullying. • To describe appropriate ways to behave towards other people online and why this is important.	**Privacy and security** • To describe simple strategies for creating and keeping passwords private.
Mastery	Children begin to apply these skills across different programmes and within different curriculum subjects. Refer to https://teachcomputing.org/curriculum/key-stage-2 for teaching resources linked to above and EVOLVE for support with the application of online safety.		
Key vocabulary	digital device, input, output, network, system, wireless access, connection, digital, non-digital, orientation, placeholder, onion skimming, desktop publishing, frame, sequence, content, consistency, transition, branching database, decision tree, selection, order, commands, motion, run, debug, code, modify, algorithm, program, setup, test		

Cultural Capital	**Linking Computing to subject areas**	SPARK Tees Valley https://www.sparkteesvalley.com/my-login?action=auth&key=4f5172135ff9292713d154825f45be2b Primary Computing https://www.computingatschool.org.uk/resource-library/primary-computing STEM Teaching https://www.stem.org.uk/primary Discovery Education https://app.discoveryeducation.co.uk/learn/signin?next=https%3A%2F%2Fapp.discoveryeducation.co.uk%2Fsuite MrPICT https://www.mrpict.com/
	Online Safety	Childline https://www.childline.org.uk/info-advice/bullying-abuse-safety/online-mobile-safety/staying-safe-online/?scrlybrkr=90f01810 CEOP https://www.thinkuknow.co.uk/parents/jessie-and-friends-videos/ National Online Safety https://nationalonlinesafety.com/ Online Safety UK https://www.onlinesafetyuk.com/?gclid=EAIaIQobChMItJqEqLjq_QIV2IBQBh3pnqKpEAAYASAAEgLI5PD_BwE Internet Matters https://www.internetmatters.org/schools-esafety/primary/ SFGfl https://swgfl.org.uk/online-safety/
Scaffolding / Support	**Things to consider and adapt to support learners:** • **Font size** • **Pictorial instructions based on the program the child will be using** • **Now and then steps** • **Allow pupils different ways to share their work through typed, photographs, videos and voice recordings** • **Scaffolds that support the topic/program**	

	Autumn Computing systems and networks Creating media	**Spring** Programming Data and Information	**Summer** Creating media Programming
	Skills • To use a digital device to access the internet. • To create and edit and edit an audio file	**Skills** • To present and record data using data logging. • To identify repetition in programs.	**Skills** • To design, create, test and evaluate an algorithm for a program which includes repetition. • To demonstrate how create and edit photos.

	Knowledge – • How do networks physically connect to other networks? • How do networked devices make up the internet? • How can content be added and accessed on the WWW? • What are the consequences of unreliable content? • How is sound identified so that it can be recorded and edited? • What are the different parts of creating a podcast project? • How is audio added to enhance a podcast project? • How effective was the use of audio in the project?	**Knowledge –** • Why is accuracy in programming important? • How are programs created in a text-based language? • How are count-controlled loops used in programs to produce a given outcome? • How can data be gathered over time can be used to answer questions? • How can a digital device be used to collect data automatically? • How can a computer help us analyse data? • What data is needed to answer the questions?	**Knowledge –** • How can the composition of digital images be changed? • Can the colours be changed in digital images? • How can cloning be used in photo editing? • How can changes improve an image? • How can count-controlled loops be used in different programming environments? • Can two or more loops run at the same time? • How can an infinite loop be modified in a given program? • How can a project include repetition?
Project Evolve (Online Safety)	**Health, Wellbeing and Lifestyle** To explain how using technology can be a distraction from other things, in both a positive and negative way. To identify times or situations when someone may need to limit the amount of time they use technology.	**Self-image, identity and online bullying** To explain how my online identity can be different to my offline identity. To explain that others online can pretend to be someone else, including my friends, and can suggest reasons why they might do this. To describe ways people can be bullied through a range of media (e.g. image, video, text, chat). To 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).	**Privacy and security** To describe strategies for keeping personal information private, depending on context. To explain that internet use is never fully private and is monitored, e.g. adult supervision.
Mastery	Children begin to apply these skills across different programmes and within different curriculum subjects. Refer to https://teachcomputing.org/curriculum/key-stage-2 for teaching resources linked to above and EVOLVE for support with the application of online safety.		
Key Vocabulary	wireless access point (WAP), network router, download, sharing, security, permission, World Wide Web (www), links, files, web page, web address, input device, output device, speaker, audio, import, record, trim, image, edit, crop, rotate, saturation, adjustments, effects, retouch, combine, foreground, zoom, device, sensor, logger, data point, data set, analyse, program, algorithm, debug, pattern, count-controlled loop, infinite loop, decompose, procedure, design, test, run, refine, modify		
Cultural Capital	**Linking Computing to subject areas** **Online Safety**	SPARK Tees Valley https://www.sparkteesvalley.com/my-login?action=auth&key=4f5172135ff9292713d154825f45be2b Primary Computing https://www.computingatschool.org.uk/resource-library/primary-computing STEM Teaching https://www.stem.org.uk/primary Discovery Education https://app.discoveryeducation.co.uk/learn/signin?next=https%3A%2F%2Fapp.discoveryeducation.co.uk%2Fsuite MrPICT https://www.mrpict.com/ Childline https://www.childline.org.uk/info-advice/bullying-abuse-safety/online-mobile-safety/staying-safe-online/?scrlybrkr=90f01810 CEOP https://www.thinkuknow.co.uk/parents/jessie-and-friends-videos/ National Online Safety https://nationalonlinesafety.com/ Online Safety UK https://www.onlinesafetyuk.com/?gclid=EAIaIQobChMItJqEqLjq_QIV2IBQBh3pngKpEAAYASAAEgLI5PD_BwE Internet Matters https://www.internetmatters.org/schools-esafety/primary/ SFGfl https://swgfl.org.uk/online-safety/	

Scaffolding / Support	**Things to consider and adapt to support learners:** • **Font size** • **Pictorial instructions based on the program the child will be using** • **Now and then steps** • **Allow pupils different ways to share their work through typed, photographs, videos and voice recordings** • **Scaffolds that support the topic/program**

Year 5	**Autumn**	**Spring**	**Summer**
	Skills – Children: •To use a digital device to access and use a search engine. •To produce and edit a video for a specific purpose	**Skills –** Children: • To process, analyse and present data using flat file databases • To explore conditions and actions in programs • Can I write a program that includes count-controlled loops?	**Skills –** Children: • To create, test and evaluate an algorithm with selections e.g. designing a quiz. • To use specific tools to create a vector graph.

	Knowledge – • Can computers be connected together to form systems? • How are search engines used? • How are search results are ranked? • Why is the order of search results important? • What makes a video effective? • What techniques are used to capture a video? • How can videos be improved through reshooting and editing? • What is the impact of the choices made when making and sharing a video?	**Knowledge –** •How are simple circuits connected to computers controlled? •How can loops be used to repeatedly check whether a condition has been met? •How can physical projects be created to include selection? •How do forms record information? •How can grouping and sorting data answer questions? •Can computer programs be used to compare data visually? •How can a real-world database be used to answer questions?	**Knowledge –** •How can drawing tools be used to produce different outcomes? •How are vector drawing combining shapes created? •How can tools be used to create a desired effect? •How is selection is used in computer programs? •How does a conditional statement connect a condition to an outcome? •How does selection direct the flow of a program? •How can programs using selection be created and evaluated?
Project Evolve (Online Safety)	**Health, wellbeing and lifestyle** To describe ways technology can affect health and well-being both positively (e.g. mindfulness apps) and negatively. To describe some strategies, tips or advice to promote health and wellbeing with regards to technology. To 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.	**Self-image, identity and online bullying** To explain how identity online can be copied, modified or altered. To recognise online bullying can be different to bullying in the physical world and can describe some of those differences. To identify a range of ways to report concerns and access support both in school and at home about online bullying.	**Privacy and security** To explain what app permissions are and can give some examples. To explain how many free apps or services may read and share private information (e.g. friends, contacts, likes, images, videos, voice, messages, geolocation) with others.
Mastery	Children begin to apply these skills across different programmes and within different curriculum subjects. Refer to https://teachcomputing.org/curriculum/key-stage-2 for teaching resources linked to above and EVOLVE for support with the application of online safety.		
Key Vocabulary	search engine optimisation(SEO), web crawler, content creator, system, connection, ranking, digital input, digital output, refine, search engine, vector, reflection, rotate, duplicate, reuse, group, ungroup, talking head, panning, lens, zoom, long-shot, mid-range, split, trim, clip, reshoot, evaluate, export, database, data, field, value, filter, presentation, microcontroller, components, count-controlled loop, infinite loop, condition, selection, debug, outcomes, conditional statement, implement, test, run, modify, setup, operator		

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	Online Safety	Childline https://www.childline.org.uk/info-advice/bullying-abuse-safety/online-mobile-safety/staying-safe-online/?scrlybrkr=90f01810 CEOP https://www.thinkuknow.co.uk/parents/jessie-and-friends-videos/ National Online Safety https://nationalonlinesafety.com/ Online Safety UK https://www.onlinesafetyuk.com/?gclid=EAIaIQobChMItJqEqLjq_QIV2IBQBh3pngKpEAAYASAAEgLI5PD_BwE Internet Matters https://www.internetmatters.org/schools-esafety/primary/ SFGfl https://swgfl.org.uk/online-safety/
Scaffolding / Support	**Things to consider and adapt to support learners:** • **Font size** • **Pictorial instructions based on the program the child will be using** • **Now and then steps** • **Allow pupils different ways to share their work through typed, photographs, videos and voice recordings** • **Scaffolds that support the topic/program**	

Year 6	**Autumn** Computing Systems and Networks Creating Media	**Spring** Programming	**Summer** Data and Information Programming Creating Media
	Skills – Children: •To use Microsoft PowerPoint to create simple slides which include texts and images. •To develop and review a webpage using various media.	**Skills –** Children: • To design and create a code to programme a VexGo to complete a number of activities.	**Skills –** Children: • To use programming skills in a new environment, to programme a micro:bit. • To create a micro:bit counter and timer. • To process, analyse and present data using spreadsheets.

	Knowledge – •What is the importance of internet addresses? •How is data transferred across the internet? •How can sharing information online help people to work together? •How can technology be used to communicate? •How is an existing website structured? •How are web pages created and evaluated? •How did people crack codes in WW2?	**Knowledge –** • What is robotics? • How are sensors and motors controlled on a VexGo? • What is the relationship between motor power and speed? • What are autonomous decision-making and control systems? • How does a Hero Robot move game objects to the Underwater Lab? • How does a Hero Robot fix a pipeline problem and gather data on aquatic life? • How does a Hero Robot move and lift a sensor onto the Volcano? • How does a Hero Robot to move the turbines, open the clam and deliver the pearl?	**Knowledge –** • What is a micro:bit? • How is code created and run on a controllable device? • What inputs and outputs are needed are needed on a controllable device? • How can micro:bits be wearable computer devices? • How is data collected from a micro:bit? • How is data analysed and represented in a spreadsheet?
Project Evolve (Online Safety)	**Health, wellbeing and lifestyle** To recognise and discuss the pressures that technology can place on someone and how / when they could manage this. To recognise features of persuasive design and how they are used to keep users engaged (current and future use).	**Self-image, identity and online bullying** To 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. To describe how to capture bullying content as evidence (e.g screen-grab, URL, profile) to share with others who can help.	**Privacy and security** To explain what to do if a password is shared, lost or stolen. To 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). To describe simple ways to increase privacy on apps and services that provide privacy settings. To understand online services have terms and conditions that govern their use.
Mastery	Children begin to apply these skills across different programmes and within different curriculum subjects. Refer to https://teachcomputing.org/curriculum/key-stage-2 for teaching resources linked to above and EVOLVE for support with the application of online safety.		

Key vocabulary	communication, protocol, Internet Protocol (IP), Domain Name Server (DNS), server, data payload, public, private, one-way, one-to-one, two-way, one-to-many, packet header, Hypertext Markup Language (HTML), webpage, browser, media, navigation, hyperlink, subpage, evaluate, implication, embed, navigation, copyright, breadcrumb trail, perspective, view, handles, resize, combine, construct, data, collecting, duplicate, operation, software, comparison, variable, data set, value set, debug, program, algorithm, modify, refine, evaluate, code, trace, selection, sensing, variable	
Cultural Capital	**Linking Computing to subject areas**	SPARK Tees Valley https://www.sparkteesvalley.com/my-login?action=auth&key=4f5172135ff9292713d154825f45be2b Primary Computing https://www.computingatschool.org.uk/resource-library/primary-computing STEM Teaching https://www.stem.org.uk/primary Discovery Education https://app.discoveryeducation.co.uk/learn/signin?next=https%3A%2F%2Fapp.discoveryeducation.co.uk%2Fsuite MrPICT https://www.mrpict.com/
	Online Safety	Childline https://www.childline.org.uk/info-advice/bullying-abuse-safety/online-mobile-safety/staying-safe-online/?scrlybrkr=90f01810 CEOP https://www.thinkuknow.co.uk/parents/jessie-and-friends-videos/ National Online Safety https://nationalonlinesafety.com/ Online Safety UK https://www.onlinesafetyuk.com/?gclid=EAIaIQobChMItJqEqLjq_QIV2IBQBh3pngKpEAAYASAAEgLI5PD_BwE Internet Matters https://www.internetmatters.org/schools-esafety/primary/ SFGfl https://swgfl.org.uk/online-safety/
Scaffolding / Support	**Things to consider and adapt to support learners:** • **Font size** • **Pictorial instructions based on the program the child will be using** • **Now and then steps** • **Allow pupils different ways to share their work through typed, photographs, videos and voice recordings** • **Scaffolds that support the topic/program**	