

Intent, Implementation and Impact

Our community is inspired by our Christian values to enable all to flourish in mind, body, heart and spirit.

***"HE SET MY FEET ON A ROCK AND GAVE ME A FIRM PLACE TO STAND"
(PSALM 40 V. 2)***

Intent

All areas of our curriculum are underpinned by our Gospel values and we ensure that our curriculum makes links to these values. At the heart of each subject is a set of core skills which form a subject learning journey, this journey is built from EYFS through to year 6, with the skills being progressive as you move through the school. Knowledge is communicated to ensure coverage of the National Curriculum and it is through this knowledge that children apply their skills.

Children at St Giles' and St George's leave with a secure knowledge of both the academic knowledge and skills needed for the next stage of their education. They will have developed a clear set Christian and moral values, which they can apply in all areas of their lives, and will have taken part in real-life experiences which will have raised their aspirations and given them a thirst for wisdom and knowledge.

The intention of the St Giles' and St George's Computing learning journey is first and foremost to provide children with the skills and knowledge they need to embrace new technologies and flourish, both responsibly and safely, in an increasingly digital world. To achieve this, we focus on developing the skills, knowledge and understanding that children need in order to become autonomous, independent users of computing technologies, and gain confidence through active learning and enjoyable activities.



Implementation

In line with the National Curriculum, St Giles' and St George's Computing learning journey identifies five key areas, which stem from the key strands of computing: **Computer Science, Information Technology and Digital Literacy**. These key areas are woven together to create an engaging and enriching learning experience.

- **Computer systems and networks**
- **Programming**
- **Creating media**
- **Data handling**
- **Online safety**

These areas create a cyclical route via a spiral curriculum model, through which pupils can develop their computing knowledge and skills by revisiting and building on previous learning.

The implementation of this curriculum ensures a broad and balanced coverage of National Curriculum requirements, and our 'Skills Showcase' units provide pupils with the opportunity to learn and apply transferable skills. Where appropriate, units have been created to link to other subjects, such as art, science and music to enable the development of further transferable skills, and genuine cross-curricular learning.

Computing is taught for 1 hour each week or 2 hours every two weeks depending on the unit and year group being taught. Each new unit of learning is introduced through an 'explore' activity which summarises previous knowledge and skills shared by the children. Children are then introduced to the key vocabulary which will be shared during the unit. During the lesson, activities are scaffolded where appropriate, and assessment and feedback will focus on misconceptions and next steps for learning. At the end of each unit of learning, children will complete an end of unit 'review' which will feed into future planning.



Online Safety is taught for 1 hour per half term, and follows the same lesson and learning journey outlined above.

In Computing, work is recorded on Evidence Me, with any additional work on the network's Pupil Share channel in year group folders for monitoring and sharing purposes

EYFS



Reception Theme Subject Journey



Explore

Children have the opportunity to explore the topic and subject area through tuff trays and child led learning. KWL grids and mind maps used to identify prior learning.

Teach

Input and carpet sessions, in the moment teaching opportunities, concrete materials, teaching of new topic specific vocabulary.

Practise

Group work, teacher guided sessions, tuff tray activities after input, key questions for children to explore and investigate on their own after being taught skills.

Apply

Independent tasks, some enhanced provision opportunities, continuous provision opportunities, child-led learning

Review

Mini input on previous learning, KWL revisit, mind map adding repeating 'explore' activities.



Computing is taught as part of the Personal, Social and Emotional Development and Expressive Arts and Design area of the EYFS learning and development. Children in Reception will explore a range of computational skills and questions through their theme for the half term. Where appropriate, lessons will take the same form as the rest of the school: explore, teach, practise, apply and review. There will then be an independent activity relating to the input. All classrooms have an investigation station. As part of this, computing based enhanced provision will be planned for. Children also have access to computing-based resources which they are free to use as part of the child-initiated provision. Evidence of these lessons and other learning around computing can be found on Evidence Me linked to the appropriate statements and ELG.

ELG	Personal, Social and Emotional Development	Managing Self	<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.
	Expressive Arts and Design	Creating with Materials	<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.

Impact

In addition to the outcomes shown on our curriculum tree, the specific impact of the St Giles' and St George's Computing Learning Journey is that children will:

- ✓ Be critical thinkers and able to understand how to make informed and appropriate digital choices in the future.
- ✓ Understand the importance that computing will have going forward in both their educational and working life and in their social and personal futures.
- ✓ Understand how to balance time spent on technology and time spent away from it in a healthy and appropriate manner.
- ✓ Understand that technology helps to showcase their ideas and creativity. They will know that different types of software and hardware can help them achieve a broad variety of artistic and practical aims.
- ✓ Show a clear progression of technical skills across all areas of the National curriculum - computer science, information technology and digital literacy.
- ✓ Be able to use technology both individually and as part of a collaborative team.
- ✓ Be aware of online safety issues and protocols and be able to deal with any problems in a responsible and appropriate manner.
- ✓ Have an awareness of developments in technology and have an idea of how current technologies work and relate to one another.
- ✓ Meet the end of key stage expectations outlined in the National curriculum for Computing.

Formative assessment takes part in each lesson and misconception and next steps of the focus for feedback. Summative assessment is completed for each child at the end of each unit of teaching using the assessment overviews at the end of this document. A best fit approach to statements achieved results in an end of year summative grade.

Adaptive Teaching Strategies

Cognition and Learning	Communication and Interaction	SEMH	Physical and Sensory
<ul style="list-style-type: none"> • Alternative methods of recording (talking tins, laptops, creative tasks) • Differentiated tasks • Visual supports • Word banks/phonic maps • Pre-teaching of vocabulary • Teaching of key skills • Coloured overlays • Timers and chunked activities • Use of practical apparatus • Sit close to the board • Allow extra time 	<ul style="list-style-type: none"> • Talking tins • Pre-teaching language • Visuals to support • Social stories • Now/Next • Increased focus on Oracy and developing talk opportunities • Thinking time • Explicit instructions • Makaton signs • Steps to success (one task at a time) 	<ul style="list-style-type: none"> • Brain and movement breaks • Calmbrain • Reward time • Reflection areas (weighted blankets) • Sensory/fidget toys • Sit near to the teacher • Steps to success (one task at a time) • Peer buddies 	<ul style="list-style-type: none"> • Own learning space (workstation) • Brain breaks • Appropriate seating • Fidget toys • Adapted resources (scissors, rulers etc) • Sloping board • Alternative methods of recording • Wobble cushions • Use of a sensory areas (tent) • Chew buddies • Pencil grips/sloping boards

Computing Overview

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2	Online Safety
Reception	Marvellous Me	There's No Place Like Home	Once Upon a Time	Life on the Farm	A Pirate's Life for Me	Commotion in the Ocean	
KS1 Year A	Computing Systems and Networks		Programming		Creating Media	Data Handling	Online Safety
	Improving Mouse Skills	Word Processing	Programming Bee Bots	Programming Scratch Jnr	Digital Imagery Why do we fight and argue? Should we be loyal to our friends? 	Introduction to Data	Using the internet safely.
KS1 Year B	Computing Systems and Networks	Programming	Data Handling		Programming	Creating Media	Online Safety
	What is a computer?	Algorithms Unplugged	International Space Station When have you experienced moments of wonder? 	Rocket to the Moon (Skills Showcase) What is the most beautiful thing in the world? 	Algorithms and Debugging	Stop Motion	What happens if I post online?
LKS2 Year A	Programming		Computing Systems and Networks		Creating Media	Data Handling	Online Safety
	Scratch	Further Coding with Scratch	Emailing Journey inside a Computer		Video trailers	Comparison Card Databases	Beliefs, opinions and facts on the internet.
LKS2 Year B	Computing Systems and Networks		Creating Media		Programming	Data Handling	Online Safety
	Collaborative Learning What responsibilities do I have for others?  Networks and the Internet		Website Design	HTML (Skills Showcase)	Computational Thinking	Investigating Weather What would it be like without seasons? 	What happens when I search online?
UKS2 Year A	Data Handling		Computing Systems and Networks	Creating Media	Programming		Online Safety
	Mars Rover	Mars Rover (Skills Showcase)	Search Engines	Stop Motion	Micro: bit	Scratch (Music)	Online Protection
UKS2 Year B	Computing Systems and Networks		Data Handling		Programming		Online Safety
	Bletchley Park and the History of Computers Are my beliefs important? 		Big Data 1	Big Data 2	Introduction to Python		Life Online

National Curriculum Coverage

	KS1	LKS2	UKS2
Computing Systems and Networks	recognise common uses of information technology beyond school.	<p>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</p> <p>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</p>	<p>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</p> <p>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</p>
Programming	<p>Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions</p> <p>Create and debug simple programs</p>	Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs	Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts

	<p>Personal, Social and Emotional Development Work and play cooperatively and take turns with others.</p>	Use logical reasoning to predict the behaviour of simple programs	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
Creating Media	N/A	Use technology purposefully to create, organise, store, manipulate and retrieve digital content	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
Data Handling	<p>Communication and Language</p> <ul style="list-style-type: none"> -Articulate their thoughts and ideas in well-formed sentences. -Use talk to help work out problems and organise thinking and activities, and to explain how things work and why they might happen. <p>- Participate in small group, class and one-to-one discussions, offering their own ideas, using recently introduced vocabulary.</p> <p>Mathematics</p> <ul style="list-style-type: none"> -Count objects, actions and sounds. - Subitise. -Count beyond 10. -Compare numbers. <ul style="list-style-type: none"> -Understand the 'one more than/ one less than' relationship between consecutive numbers. -Continue, copy and create repeating patterns. -Compare length, weight and capacity. 	Use technology purposefully to create, organise, store, manipulate and retrieve digital content	Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content	Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content

<p>Online Safety</p>	<p>Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies</p>	<p>Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact</p>	<p>Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact</p>
----------------------	--	--	--

Skill and Knowledge Progression

Computing Systems and Networks	KS1	LKS2	UKS2
<p>Knowledge</p>	<p>To know that buttons are a form of input that give a computer an instruction about what to do (output).</p> <p>To know the difference between a desktop and laptop computer.</p> <p>To know that when we create something on a computer it can be more easily saved and shared than a paper version.</p> <p>To know the different parts of a computer.</p>	<p>To know the roles that inputs and outputs play on computers.</p> <p>To know what a tablet is and how it is different from a laptop/desktop computer.</p> <p>To understand the basic concept of a network (both wired and wireless), and how the internet uses networks to share files (inc. the role of packets and how they are transferred).</p> <p>To know what the different components of a computer do and how they work together</p>	<p>To know the roles that more complex inputs and outputs play on computers.</p> <p>To understand what data packets are and why it is important for website data transfer.</p> <p>To know that external devices can be programmed by a separate computer.</p> <p>To know that computer networks provide multiple services and opportunity for communication and collaboration.</p>

<p>Skills</p>	<p>Developing control of the mouse to click, drag, fill and select.</p> <p>To develop word processing skills, including altering text, copying and pasting and using keyboard shortcuts.</p>	<p>To use images, text, transitions and animation in presentation slides.</p> <p>To use software collaboratively online to work as a team.</p> <p>To compose an email including subject, to and from.</p> <p>To add an attachment to an email.</p>	<p>To understand what techniques are required to create a presentation using appropriate software.</p>
<p>Programming</p> <p>Knowledge</p>	<p>To know that abstraction is the removing of unnecessary detail to help solve a problem.</p> <p>To understand that the character in Scratch Jnr is controlled by the programming blocks.</p> <p>To know that loops in programming are where you set a certain instruction (or instructions) to be repeated multiple times.</p>	<p>To understand how decomposition is used in programming to help break down a problem.</p> <p>To know that Scratch is a programming language and some of its basic functions.</p> <p>To understand how to use loops to improve programming.</p> <p>To understand you can remix an existing code.</p> <p>To continue existing code and use abstraction and pattern recognition to modify it.</p>	<p>To know that combining computational thinking skills (sequence, abstraction, decomposition etc.) can help you to solve a problem.</p> <p>To know that there are text-based programming languages such as Logo or Python.</p> <p>To know that nested loops are loops inside of loops.</p> <p>To know how to remix existing code, changing a program to personalise it.</p> <p>To understand that code can be written for several purposes (e.g. writing music).</p>

<p>Skills</p>	<p>To debug instructions when things go wrong, including in unplugged activities.</p> <p>To create a clear, precise algorithm.</p> <p>To use logical thinking to predict the behaviour of simple programmes.</p>	<p>To develop a more systematic approach to debugging code.</p> <p>To create algorithms for a specific purpose and coding a simple game independently.</p> <p>Using logical thinking to explore more software predicting, testing and explaining what it does.</p> <p>To use decomposition to solve a problem by finding out what code was used.</p> <p>Incorporating variables to make code more efficient.</p> <p>Using abstraction and pattern recognition to modify code.</p>	<p>To debug quickly and effectively to make a program more efficient.</p> <p>To write increasingly complex code to create a desired effect, developing their programming as they work.</p> <p>Evaluating code to understand its purpose and adapting it to a chosen purpose.</p> <p>Decompose a program into an algorithm.</p> <p>Using a range of programming commands, including repetition.</p>
<p>Creating Media Knowledge</p>	<p>To know how to operate a camera correctly (considering angles and light) or tablet to take good photos and videos.</p> <p>To know that you can edit, crop and filter photographs.</p>	<p>To know that different types of camera shots can make my photos or videos look more effective.</p> <p>To know that I can edit photos and videos using film editing software, including the addition of transitions and text.</p>	<p>To understand that stop motion animation is an animation filmed on frame at a time using models, with tiny changes between each photograph.</p> <p>To know that editing is an important feature of making and improving a stop motion animation.</p>
<p>Skills</p>	<p>Use a basic range of tools within graphic editing software. Creating and labelling images.</p>	<p>Using software to edit and enhance images and videos (adding music, sounds and text on screen with transitions).</p> <p>Using online software to create a website.</p>	<p>Identify ways to improve and edit programs, videos and images and using video editing software to animate.</p> <p>Use AI to create presentations.</p>

<p>Data Handling</p> <p>Knowledge</p>	<p>To know what data to use to answer certain questions.</p> <p>To know how charts and pictograms can be created using a computer.</p>	<p>To know that a database is a collection of data stored in a logical, structures and orderly manner.</p> <p>To know that different visual representations of data can be made on a computer.</p> <p>To know that sensor data can be used to forecast the weather.</p> <p>To know that sensors can be used as inputs e.g. weather stations use sensors to gather and record data which predicts the weather</p>	<p>To know that data contained within barcodes and QR codes can be used by computers.</p> <p>Understanding and identifying barcodes, QR codes and RFID and identifying devices and applications that can scan or read them.</p> <p>To know that data is often encrypted so that even if it is stolen, it is not useful to the thief.</p> <p>To understand binary code.</p>
<p>Skills</p>	<p>Collecting and inputting data into a spreadsheet.</p> <p>Interpreting data from a spreadsheet</p>	<p>Sorting data in a spreadsheet to compare using the 'sort by...' option.</p> <p>To use an electronic database.</p>	<p>Gathering and analysing data in real time.</p> <p>Creating formulas and sorting data within spreadsheets.</p> <p>To use simple binary addition.</p>
<p>Online Safety</p> <p>Knowledge</p>	<p>To know that you should tell a trusted adult if you feel unsafe or worried.</p> <p>To understand what a digital footprint is and knowing what information is safe or unsafe to post online.</p>	<p>To know that privacy settings limit who can access your personal information, such as your name, age, gender etc.</p> <p>To know that not everything on the internet is true: people share facts, beliefs and opinions online.</p>	<p>To know that apps require permission to access private information and that you can alter the permissions.</p> <p>To understand how online information can be used to form judgements.</p> <p>To know come common online scams.</p>

	<p>To understand that not everything I see or read is true.</p> <p>To know that passwords are important for security.</p>	<p>To know what social media is and that age restrictions apply.</p> <p>Understanding why some results come before others when searching.</p> <p>To understand the importance of having a secure password.</p> <p>To know possible dangers online and to stay safe and use an online community safely.</p>	<p>Developing searching skills to help find relevant information on the internet and showing an understanding of how search engines work.</p> <p>To understand the importance of using different passwords for different online services, and to know some effective strategies for managing those passwords.</p> <p>To know the positive and negative impacts of sharing online.</p>
Skills	<p>Logging in and out and saving work on their own account.</p> <p>To explain how actions on the internet can affect others.</p> <p>To recognise that people you do not know on the internet are strangers and are not always who they say they are.</p>	<p>Learning how to create a strong password.</p> <p>To identify respectful and disrespectful online behaviour.</p> <p>To reflect on the positives and negatives of time spent online.</p>	<p>Understanding the importance of secure passwords and how to create them.</p> <p>To explain what to do if they experience bullying online.</p> <p>Evaluating the pros and cons of online communication.</p>

Planning and Assessment Overviews

Please find below the planning and assessments overviews for each unit of Computing. They are organised into the five strands of our Computing Curriculum, which are as follows:

Computing Systems and Networks

Programming

Creating Media

Data Handling

Online Safety

Prior knowledge and skills	Knowledge and Skills to be taught	Next steps
KS1 Year A Computing Systems and Networks Improving Mouse Skills		
<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. • Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and functions. 	<ul style="list-style-type: none"> • Developing control of the mouse to click, drag, fill and select. • To know the different parts of a computer. 	<ul style="list-style-type: none"> • To know what a tablet is and how it is different from a laptop computer. • To know the roles that inputs and outputs play on computers.
Key Vocabulary:		
	computer mouse resize tool click drag	screen clip art drag and drop keyboard tablet laptop input output

Prior knowledge and skills	Knowledge and Skills to be taught	Next steps
KS1 Year A Computing Systems and Networks Word Processing		
<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. • Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and functions. 	<ul style="list-style-type: none"> • To develop word processing skills, including altering text, copying and pasting and using keyboard shortcuts. • To know that when we create something on a computer it can be more easily saved and shared than a paper version. 	<ul style="list-style-type: none"> • To use images, text, transitions and animations in presentation slides. • To use software collaboratively online to work as a team.
Key Vocabulary:		
	backspace bold copy cut delete highlight image word-processing software	keyboard paste redo search space bar underline undo transitions insert animation/animate

Prior knowledge and skills	Knowledge and Skills to be taught	Next steps
KS1 Year B Computing Systems and Networks What is a Computer?		
<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. • Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and functions. 	<ul style="list-style-type: none"> • To know the different parts of a computer. • To know the difference between a desktop and laptop computer. • To know that buttons are a form of input that give a computer an instruction about what to do (output). • To know that when we create something on a computer it can be more easily saved and shared than a paper version. 	<ul style="list-style-type: none"> • To know what the different components of a computer do and how they work together. • To know the roles that inputs and outputs play on computers. • To know what a tablet is and how it is different from a laptop/desktop computer.
Key Vocabulary:		
	screen software desktop keyboard monitor printer CPU charging port	laptop mouse output technology input speaker trackpad USB port tablet algorithm communication information

Prior knowledge and skills	Knowledge and Skills to be taught	Next steps
LKS2 Year A Computing Systems and Networks Emailing and Journey Inside a Computer		
<ul style="list-style-type: none"> To know the different parts of a computer. To know the difference between a desktop and laptop computer. To know that buttons are a form of input that give a computer an instruction about what to do (output). To know that when we create something on a computer it can be more easily saved and shared than a paper version. To develop word processing skills, including altering text, copying and pasting and using keyboard shortcuts. Developing control of the mouse to click, drag, fill and select. 	<ul style="list-style-type: none"> To use software collaboratively online to work as a team. To understand how the internet uses networks to share files (inc. the role of packets and how they are transferred). To know the roles that inputs and outputs play on computers. To know what a tablet is and how it is different from a laptop/desktop computer. To know what the different components of a computer do and how they work together. To compose an email including subject, to and from. To add an attachment to an email. 	<ul style="list-style-type: none"> To know that computer networks provide multiple services and opportunity for communication and collaboration. To know the roles that more complex inputs and outputs play on computers, e.g. sensors, scanners, webcams and touchscreens.
Key Vocabulary:		
mouse click. drag and drop keyboard desktop laptop	input output software copy paste shortcut algorithm data CPU decompose GPU hard drive attachment	email monitor RAM tablet ROM touchscreen subject collaboration network communication

Prior knowledge and skills	Knowledge and Skills to be taught	Next steps		
LKS2 Year B Computing Systems and Networks Collaborative Learning and Networks and the Internet				
<ul style="list-style-type: none"> • To know the different parts of a computer. • To know the difference between a desktop and laptop computer. • To know that buttons are a form of input that give a computer an instruction about what to do (output). • To know that when we create something on a computer it can be more easily saved and shared than a paper version. • To develop word processing skills, including altering text, copying and pasting and using keyboard shortcuts. • Developing control of the mouse to click, drag, fill and select. 	<ul style="list-style-type: none"> • To use software collaboratively online to work as a team. • To use images, text, transitions and animations in presentation slides. • To understand the basic concept of a network (both wired and wireless). • To understand how the internet uses networks to share files (inc. the role of packets and how they are transferred). 	<ul style="list-style-type: none"> • To know that computer networks provide multiple services and opportunity for communication and collaboration. • To understand what techniques are required to create a presentation using appropriate software. 		
Key Vocabulary:				
mouse click. drag and drop keyboard desktop laptop	input output software copy paste shortcut	file internet network packet data router server	user wired/ wireless wireless access point transitions insert collaboration	network communication collaboration software

Prior knowledge and skills	Knowledge and Skills to be taught	Next steps
UKS2 Year A Computing Systems and Networks Search Engines		
<ul style="list-style-type: none"> • To use software collaboratively online to work as a team. • To understand how the internet uses networks to share files (inc. the role of packets and how they are transferred). • To know the roles that inputs and outputs play on computers. • To know what the different components of a computer do and how they work together. 	<ul style="list-style-type: none"> • To know the roles that more complex inputs and outputs play on computers, e.g. sensors, scanners, webcams and touchscreens. • To know that computer networks provide multiple services and opportunity for communication and collaboration. • To develop searching skills to help find relevant information on the internet and showing an understanding of how search engines work. • To understand what data packets are and why it is important for website data transfer. 	
Key Vocabulary:		
file internet network packet data router server collaboration	algorithm data wired/wireless algorithm copyright fake news keywords page rank search engine index	inaccurate web crawler www credit

Prior knowledge and skills	Knowledge and Skills to be taught	Next steps
UKS2 Year B Computer Systems and Networks History of Computers & Bletchley Park		
<ul style="list-style-type: none"> • To use software collaboratively online to work as a team. • To understand how the internet uses networks to share files (inc. the role of packets and how they are transferred). • To know the roles that inputs and outputs play on computers. • To know what a tablet is and how it is different from a laptop/desktop computer. • To know what the different components of a computer do and how they work together. • To use images, text, transitions and animations in presentation slides. 	<ul style="list-style-type: none"> • To know the roles that more complex inputs and outputs play on computers, e.g. sensors, scanners, webcams and touchscreens. • To know that computer networks provide multiple services and opportunity for communication and collaboration. • To understand what techniques are required to create a presentation using appropriate software. • To develop searching skills to help find relevant information on the internet and showing an understanding of how search engines work. • To know that external devices can be programmed by a separate computer. 	
Key Vocabulary:		
file internet network packet data router server	algorithm data wired/wireless transitions collaboration	inventions trial and error chip and pin brute-force hacking combination
<div style="display: flex; justify-content: space-between;"> <div data-bbox="120 1257 651 1481"> file internet network packet data router server </div> <div data-bbox="651 1257 1469 1481"> algorithm data wired/wireless transitions collaboration </div> <div data-bbox="1469 1257 2112 1481"> secure cipher (Caesar, Pigpen and Nth letter) script technological advancement </div> </div>		

Prior knowledge and skills	Knowledge and Skills to be taught	Next steps
KS1 Year A Programming Programming Bee Bots		
<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. • Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and functions. 	<ul style="list-style-type: none"> • To use logical thinking to predict the behaviour of simple programmes. • To debug instructions when things go wrong, including in unplugged activities • To create a clear, precise algorithm. 	<ul style="list-style-type: none"> • To develop a more systematic approach to debugging code. • To use logical thinking to explore more software predicting, testing and explaining what it does. • To create algorithms for a specific purpose.
Key Vocabulary:		
	algorithm debug instructions program tinker	inputting predict test explore demonstration code
		algorithm logical thinking debug tinker predict test

Prior knowledge and skills	Knowledge and Skills to be taught	Next steps
KS1 Year A Programming Scratch Jnr		
<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. • Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and functions. 	<ul style="list-style-type: none"> • To use logical thinking to predict the behaviour of simple programmes. • To debug instructions when things go wrong, including in unplugged activities • To create a clear, precise algorithm. • To understand that the character in Scratch Jnr is controlled by the programming blocks. • To know that loops in programming are where you set a certain instruction (or instructions) to be repeated multiple times. 	<ul style="list-style-type: none"> • To develop a more systematic approach to debugging code. • To use logical thinking to explore more software predicting, testing and explaining what it does. • To understand how to use loops to improve programming.
Key Vocabulary:		
	algorithm debug bug instructions code loop	repeat blocks sound recording imitate sequence programming algorithm logical thinking debug tinker predict test

Prior knowledge and skills	Knowledge and Skills to be taught	Next steps
KS1 Year B Programming Algorithms Unplugged		
<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. • Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and functions. 	<ul style="list-style-type: none"> • To use logical thinking to predict the behaviour of simple programmes. • To debug instructions when things go wrong, including in unplugged activities • To create a clear, precise algorithm. • To know that abstraction is the removing of unnecessary detail to help solve a problem. 	<ul style="list-style-type: none"> • To use logical thinking to explore more software predicting, testing and explaining what it does. • To continue existing code and use abstraction and pattern recognition to modify it. • To develop a more systematic approach to debugging code.
Key Vocabulary:		
	algorithm AI bug debug decompose directions	input instructions order output problem virtual assistant debug logical thinking predict test patterns abstraction

Prior knowledge and skills	Knowledge and Skills to be taught	Next steps
KS1 Year B Programming Algorithms and Debugging		
<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. • Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and functions. 	<ul style="list-style-type: none"> • To use logical thinking to predict the behaviour of simple programmes. • To debug instructions when things go wrong, including in unplugged activities • To create a clear, precise algorithm. • To know that abstraction is the removing of unnecessary detail to help solve a problem. 	<ul style="list-style-type: none"> • To use logical thinking to explore more software predicting, testing and explaining what it does. • To continue existing code and use abstraction and pattern recognition to modify it. • To develop a more systematic approach to debugging code.
Key Vocabulary:		
	abstraction algorithm AI bug data debug	decompose error loop predict unnecessary correct debug logical thinking predict test patterns abstraction

Prior knowledge and skills	Knowledge and Skills to be taught	Next steps
LKS2 Year A Programming Scratch		

<ul style="list-style-type: none"> • To use logical thinking to predict the behaviour of simple programmes. • To debug instructions when things go wrong, including in unplugged activities • To create a clear, precise algorithm. • To understand that the character in Scratch Jnr is controlled by the programming blocks. • To know that loops in programming are where you set a certain instruction (or instructions) to be repeated multiple times. • To know that abstraction is the removing of unnecessary detail to help solve a problem. 	<ul style="list-style-type: none"> • To understand that Scratch is a programming language and some of its basic functions. • To understand how decomposition is used in programming to help break down a problem. • To understand how to use loops to improve programming. • To understand that you can remix on existing code. • To continue existing code and use abstraction and pattern recognition to modify it. • To use logical thinking to explore more software predicting, testing and explaining what it does. • To develop a more systematic approach to debugging code. 	<ul style="list-style-type: none"> • Evaluating code to understand its purpose and adapting it to a chosen purpose. • Using a range of programming commands, including repetition. • To know how to remix existing code, changing a program to personalise it.
---	---	---

Key Vocabulary:

<p>predict bug debug algorithm blocks loop abstraction</p>	<p>decompose input output programming sequence repetition</p>	<p>algorithm code decompose loop remix animation program tinker</p>	<p>code block predict repetition code sprite application debug interface review</p>	<p>programming command repetition remix adapt</p>
--	---	---	---	---

Prior knowledge and skills	Knowledge and Skills to be taught	Next steps
LKS2 Year A Programming Further Coding with Scratch		
<ul style="list-style-type: none"> • To use logical thinking to predict the behaviour of simple programmes. • To debug instructions when things go wrong, including in unplugged activities • To create a clear, precise algorithm. • To understand that the character in Scratch Jnr is controlled by the programming blocks. • To know that loops in programming are where you set a certain instruction (or instructions) to be repeated multiple times. • To know that abstraction is the removing of unnecessary detail to help solve a problem. 	<ul style="list-style-type: none"> • To create algorithms for a specific purpose and coding a simple game independently. • To use decomposition to solve a problem by finding out what code was used. • Incorporating variables to make code more efficient. • To develop a more systematic approach to debugging code. 	<ul style="list-style-type: none"> • Evaluating code to understand its purpose and adapting it to a chosen purpose. • Using a range of programming commands, including repetition. • To know how to remix existing code, changing a program to personalise it.
Key Vocabulary:		
predict bug debug algorithm blocks loop abstraction	decompose input output programming sequence repetition code block decompose program sprite variable conditional statement tinker	orientation project stage coordinates information position script programming command repetition remix adapt

Prior knowledge and skills	Knowledge and Skills to be taught		Next steps	
LKS2 Year B Programming Computational Thinking				
<ul style="list-style-type: none"> • To use logical thinking to predict the behaviour of simple programmes. • To debug instructions when things go wrong, including in unplugged activities • To create a clear, precise algorithm. • To know that loops in programming are where you set a certain instruction (or instructions) to be repeated multiple times. • To know that abstraction is the removing of unnecessary detail to help solve a problem. 	<ul style="list-style-type: none"> • To understand how decomposition is used in programming to help break down a problem. • To create algorithms for a specific purpose and coding a simple game independently. • Using logical thinking to explore more software predicting, testing and explaining what it does. • To use decomposition to solve a problem by finding out what code was used. • Using abstraction and pattern recognition to modify code. 		<ul style="list-style-type: none"> • To know that combining computational thinking skills (sequence, abstraction, decomposition etc.) can help you solve a problem. • Evaluating code to understand its purpose and adapting it to a chosen purpose. • To know how to remix existing code, changing a program to personalise it. 	
Key Vocabulary:				
predict bug debug algorithm repetition abstraction	decompose input output programming unnecessary	abstraction algorithm code computational thinking decomposition input	script sequence variable logical reasoning pattern recognition	sequence abstraction decompose remix program

Prior knowledge and skills	Knowledge and Skills to be taught	Next steps
UKS2 Year A Programming Micro: bit		
<ul style="list-style-type: none"> • To understand how decomposition is used in programming to help break down a problem. • To understand how to use loops to improve programming. • To understand that you can remix on existing code. • To continue existing code and use abstraction and pattern recognition to modify it. • To use logical thinking to explore more software predicting, testing and explaining what it does. • To create algorithms for a specific purpose and coding a simple game independently. • To develop a more systematic approach to debugging code • Using abstraction and pattern recognition to modify code. 	<ul style="list-style-type: none"> • To know that combining computational thinking skills (sequence, abstraction, decomposition etc.) can help you solve a problem. • To understand that code can be written for several purposes (e.g. writing music). • Evaluating code to understand its purpose and adapting it to a chosen purpose. • Using a range of programming commands, including repetition. • To debug quickly and effectively to make a program more efficient. 	
Key Vocabulary:		
algorithm code decompose loop remix script tinker abstraction program pattern recognition	algorithm decompose connection load reset Bluetooth repetition tinkering	download loop systematic pairing predict code block debug variable

Prior knowledge and skills	Knowledge and Skills to be taught	Next steps
UKS2 Year A Programming Scratch (Music)		
<ul style="list-style-type: none"> • To understand that Scratch is a programming language and some of its basic functions. • To understand how decomposition is used in programming to help break down a problem. • To understand how to use loops to improve programming. • To understand that you can remix on existing code. • To continue existing code and use abstraction and pattern recognition to modify it. • To use logical thinking to explore more software predicting, testing and explaining what it does. • To create algorithms for a specific purpose and coding a simple game independently. • To develop a more systematic approach to debugging code 	<ul style="list-style-type: none"> • To know that combining computational thinking skills (sequence, abstraction, decomposition etc.) can help you solve a problem. • To understand that code can be written for several purposes (e.g. writing music). • To know that nested loops are loops inside of loops. • To know how to remix existing code, changing a program to personalise it. • To debug quickly and effectively to make a program more efficient. 	
Key Vocabulary:		
algorithm code decompose loop remix abstraction	script tinker animation program pattern recognition	adapt decompose output repeat soundtrack code nested loops pitch rhythm tempo timbre debug program

Prior knowledge and skills	Knowledge and Skills to be taught	Next steps
UKS2 Year B Programming Introduction to Python		
<ul style="list-style-type: none"> • To understand how decomposition is used in programming to help break down a problem. • To understand how to use loops to improve programming. • To understand that you can remix on existing code. • To continue existing code and use abstraction and pattern recognition to modify it. • To use logical thinking to explore more software predicting, testing and explaining what it does. • To create algorithms for a specific purpose and coding a simple game independently. • To develop a more systematic approach to debugging code 	<ul style="list-style-type: none"> • To know that combining computational thinking skills (sequence, abstraction, decomposition etc.) can help you solve a problem. • To know that there are text-based programming languages such as Logo or Python. • To know that nested loops are loops inside of loops. • To know how to remix existing code, changing a program to personalise it. • To understand that code can be written for several purposes (e.g. writing music). • Evaluating code to understand its purpose and adapting it to a chosen purpose. • To debug quickly and effectively to make a program more efficient. • To write increasingly complex code to create a desired effect, developing their programming as they work. • Decompose a program into an algorithm. 	
Key Vocabulary:		
algorithm code decompose loop remix script tinker abstraction program pattern recognition	algorithm design input output remix random	text-based code import indentations patterns command loop

Prior knowledge and skills	Knowledge and Skills to be taught	Next steps
KS1 Year A Creating Media Digital Imagery		
<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. • Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and functions. • 	<ul style="list-style-type: none"> • To know how to operate a camera correctly (considering angles and light) or tablet to take good photos and videos. • To know that you can edit, crop and filter photographs. • To use a basic range of tools within graphic editing software. • Creating and labelling images. 	<ul style="list-style-type: none"> • To know that different types of camera shots can make my photos or videos look more effective. • To know that I can edit photos and videos using film editing software, including the addition of transitions and text. • To use software to edit and enhance images and videos (adding music, sounds and text on screen with transitions).
Key Vocabulary:		
	background blurred camera clear crop delete device photograph	edit editing software filter image software resize save as camera angle transitions sound effects

Prior knowledge and skills	Knowledge and Skills to be taught	Next steps
KS1 Year B Creating Media Stop Motion		
<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. • Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and functions. • 	<ul style="list-style-type: none"> • To know how to operate a camera correctly (considering angles and light) or tablet to take good photos and videos. • To know that you can edit, crop and filter photographs. • To use a basic range of tools within graphic editing software. • Creating and labelling images. 	<ul style="list-style-type: none"> • To know that different types of camera shots can make my photos or videos look more effective. • To know that I can edit photos and videos using film editing software, including the addition of transitions and text. • To use software to edit and enhance images and videos (adding music, sounds and text on screen with transitions).
Key Vocabulary:		
	edit editing software filter image software resize save as	object onion skinning plan still images moving images camera angle transitions sound effects video recording

Prior knowledge and skills	Knowledge and Skills to be taught	Next steps
LKS2 Year A Creating Media Video Trailers		
<ul style="list-style-type: none"> • To know how to operate a camera correctly (considering angles and light) or tablet to take good photos and videos. • To know that you can edit, crop and filter photographs. • To use a basic range of tools within graphic editing software. • Creating and labelling images. 	<ul style="list-style-type: none"> • To know that different types of camera shots can make my photos or videos look more effective. • To know that I can edit photos and videos using film editing software, including the addition of transitions and text. • To use software to edit and enhance images and videos (adding music, sounds and text on screen with transitions). 	<ul style="list-style-type: none"> • Identify ways to improve and edit programs, videos and images and using video editing software to animate.
Key Vocabulary:		
image resize crop edit filter still images moving images photograph	camera angle clip cross blur/ fade/ zoom dip to black directional wipe transition voiceover video	film film editing software graphics import music recording sound effects story board time code background character decomposition digital device edit evaluate fluid movement frames

Prior knowledge and skills	Knowledge and Skills to be taught	Next steps
LKS2 Year B Creating Media Website Design		
<ul style="list-style-type: none"> • To know that you can edit, crop and filter photographs. • To use a basic range of tools within graphic editing software. • Creating and labelling images. 	<ul style="list-style-type: none"> • To use software to edit and enhance images and videos (adding music, sounds and text on screen with transitions). • To use online software to create a website. 	<ul style="list-style-type: none"> • Identify ways to improve and edit programs, videos and images and using video editing software to animate.
Key Vocabulary:		
image resize crop edit filter still images moving images photograph	audience collaboration content contribution design embed evaluate features homepage hyperlinks	insert published review style subpage tab web page website background decomposition design digital device edit evaluate

Prior knowledge and skills	Knowledge and Skills to be taught		Next steps
UKS2 Year A Creating Media Stop Motion			
<ul style="list-style-type: none"> To know that different types of camera shots can make my photos or videos look more effective. To know that I can edit photos and videos using film editing software, including the addition of transitions and text. To use software to edit and enhance images and videos (adding music, sounds and text on screen with transitions). 	<ul style="list-style-type: none"> To understand that stop motion animation is an animation filmed on frame at a time using models, with tiny changes between each photograph. To know that editing is an important feature of making and improving a stop motion animation. Identify ways to improve and edit programs, videos and images and using video editing software to animate. 		
Key Vocabulary:			
camera angle clip cross blur/ fade/ zoom dip to black directional wipe transition voiceover	animations animator background character decomposition design digital device	fluid movement frames model moving images onion skinning still images stop motion	
film film editing software graphics import recording sound effects story board time code	edit evaluate flipbook	storyboard zoetrope thaumatrope	

Prior knowledge and skills	Knowledge and Skills to be taught	Next steps
KS1 Year A Data Handling Introduction to Data		
<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. • Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and functions. 	<ul style="list-style-type: none"> • To know how charts and pictograms can be created using a computer. • To know what data to use to answer certain questions. • To collect data. 	<ul style="list-style-type: none"> • To know that different visual representations of data can be made on a computer. • To know that a database is a collection of data stored in a logical, structured and orderly manner.
Key Vocabulary:		
	bar chart block graph branching database chart compare data data collection sort	data representation input line graph pictogram pie chart record tally table

Prior knowledge and skills	Knowledge and Skills to be taught	Next steps
KS1 Year B Data Handling International Space Station		
<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. • Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and functions. 	<ul style="list-style-type: none"> • To know how charts and pictograms can be created using a computer. • To know what data to use to answer certain questions. • To collect data and input data into a spreadsheet. • To interpret data from a spreadsheet. 	<ul style="list-style-type: none"> • To know that a database is a collection of data stored in a logical, structured and orderly manner. • To know that different visual representations of data can be made on a computer.
Key Vocabulary:		
	algorithm column data digital content International Space Station input	monitor row satellite sensor spreadsheet temperature thermometer database logical visual representations

Prior knowledge and skills	Knowledge and Skills to be taught	Next steps	
KS1 Year B Data Handling Rocket to the Moon (Skills Showcase)			
<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. • Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and functions. 	<p style="text-align: center;">Consolidation of all taught skills so far, from different strands of computing.</p> <p>Computing Systems and Networks:</p> <ul style="list-style-type: none"> • Developing control of the mouse to click, drag, fill and select. • To know that when we create something on a computer it can be more easily saved and shared than a paper version. <p>Creating Media</p> <ul style="list-style-type: none"> • To use a basic range of tools within graphic editing software. • Creating and labelling images. <p>Data Handling</p> <ul style="list-style-type: none"> • To collect data and input data into a spreadsheet. 	<ul style="list-style-type: none"> • To know that a database is a collection of data stored in a logical, structured and orderly manner. • To know that I can edit photos and videos using film editing software, including the addition of transitions and text. 	
Key Vocabulary:			
	click drag fill select input data	editing software create label save instructions sequence	database edit editing software transitions

Prior knowledge and skills	Knowledge and Skills to be taught	Next steps
LKS2 Year B Data Handling Investigating Weather		
<ul style="list-style-type: none"> • Collecting and inputting data into a spreadsheet. • Interpreting data from a spreadsheet. • To know what data to use to answer certain questions. 	<ul style="list-style-type: none"> • To know that a database is a collection of data stored in a logical, structured and orderly manner. • To use an electronic database. • To sort data in a spreadsheet to compare using the 'sort by...' option. • To know that sensor data can be used to forecast the weather, • To know that sensors can be used as inputs e.g. weather stations use sensors to gather and record data which predicts the weather. 	<ul style="list-style-type: none"> • To create formulas and sort data within spreadsheets.
Key Vocabulary:		
category chart data database field filter graph interpret record sort spreadsheet	accurate filming forecast heat sensor measurement presenter satellite sensor data	formula

Prior knowledge and skills	Knowledge and Skills to be taught	Next steps
UKS2 Year A Data Handling Mars Rover		
<ul style="list-style-type: none"> To know that sensors can be used as inputs e.g. weather stations use sensors to gather and record data which predicts the weather. 	<ul style="list-style-type: none"> To understand binary code. To use simple binary addition. 	
Key Vocabulary:		
measurement satellite sensor data 	binary code Boolean Byte CPU data transmission decimal numbers	radio signal RAM sequence signal simulation numerical data

Prior knowledge and skills

Knowledge and Skills to be taught

Next steps

UKS2 B
Data Handling
Big Data 1 and 2

- To know that a database is a collection of data stored in a logical, structured and orderly manner.
- To know that different visual representations of data can be made on a computer.
- To use an electronic database.
- To sort data in a spreadsheet to compare using the 'sort by...' option.

- To gather and analyse data in real time.
- To create formulas and sort data within spreadsheets.
- To know that data contained within barcodes and QR codes can be used by computers.
- To know that data is often encrypted so that even if it is stolen it is not useful to the thief.
- Understanding and identifying barcodes, QR codes and RFID and identifying devices and applications that can scan or read them.

Key Vocabulary:

category
data
database
field
filter
graph
interpret
record

barcode
brand
chip
commuter
contactless
encrypt
infrared
systems analyst
formula

proximity
QR code
QR scanner
radio waves
RFID
signal
transmission
wireless

Prior knowledge and skills	Knowledge and Skills to be taught	Next steps
KS1 Year A Online Safety		
<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. • Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and functions. 	<ul style="list-style-type: none"> • To explain how actions on the internet can affect others. • To understand what a digital footprint is and knowing what information is safe or unsafe to post online. • To know that you should tell a trusted adult if you feel unsafe or worried. • To recognise that people you do not know on the internet are strangers and are not always who they say they are. 	<ul style="list-style-type: none"> • To identify respectful and disrespectful online behaviour. • To understand the importance of having a secure password. • To know possible dangers online and to stay safe and use an online community safely.
Key Vocabulary:		
	app appropriate device digital footprint internet online experience online interactions trusted adult	online safety personal information posting online report screen time sharing online stranger technology website online emotions secure trustworthy

Prior knowledge and skills	Knowledge and Skills to be taught	Next steps
KS1 Year B Online Safety		
<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. • Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and functions. 	<ul style="list-style-type: none"> • To explain how actions on the internet can affect others. • To understand what a digital footprint is and knowing what information is safe or unsafe to post online. • To know that you should tell a trusted adult if you feel unsafe or worried. • To recognise that people you do not know on the internet are strangers and are not always who they say they are. • To understand that not everything I see or read is true. • To know that passwords are important for security. • Logging in and out and saving work on their own account. 	<ul style="list-style-type: none"> • To identify respectful and disrespectful online behaviour. • To understand the importance of having a secure password. • To know possible dangers online and to stay safe and use an online community safely.
Key Vocabulary:		
	accepting consent fake offline online password permission	personal information private information real reliable sharing online source trusted adult online emotions secure trustworthy

Prior knowledge and skills	Knowledge and Skills to be taught		Next steps
LKS2 Year A Online Safety			
<ul style="list-style-type: none"> • To explain how actions on the internet can affect others. • To understand what a digital footprint is and knowing what information is safe or unsafe to post online. • To know that you should tell a trusted adult if you feel unsafe or worried. • To recognise that people you do not know on the internet are strangers and are not always who they say they are. • To understand that not everything I see or read is true. • To know that passwords are important for security. • Logging in and out and saving work on their own account. • 	<ul style="list-style-type: none"> • To know that not everything on the internet is true: people share facts, beliefs and opinions online. • To understand the actions to take before sharing something online. • To know what social media is and that age restrictions apply. • Understanding why some results come before others when searching. • To reflect on the positives and negatives of time spent online. • To know that privacy settings limit who can access your personal information, such as your name, age, gender etc. • Learning how to create a strong password. • To understand the importance of having a secure password. 		<ul style="list-style-type: none"> • Understanding the importance of secure passwords and how to create them. • Developing searching skills to help find relevant information on the internet and showing an understanding of how search engines work. • Evaluating the pros and cons of online communication.
Key Vocabulary:			
appropriate device digital footprint internet trusted adult online safety personal information report	accurate age restrictions belief content digital device fact fake news hoax	internet opinion online emotions privacy settings reliable search search engine share	communication strong password search engine pros and cons

Prior knowledge and skills	Knowledge and Skills to be taught		Next steps
LKS2 Year B Online Safety			
<ul style="list-style-type: none"> • To explain how actions on the internet can affect others. • To understand what a digital footprint is and knowing what information is safe or unsafe to post online. • To know that you should tell a trusted adult if you feel unsafe or worried. • To recognise that people you do not know on the internet are strangers and are not always who they say they are. • To understand that not everything I see or read is true. • To know that passwords are important for security. • Logging in and out and saving work on their own account. 	<ul style="list-style-type: none"> • Learning how to create a strong password. • To identify respectful and disrespectful online behaviour. • Reflect on the positives and negatives of time spent online. • To know that privacy settings limit who can access your personal information, such as your name, age, gender etc. • To know that not everything on the internet is true: people share facts, beliefs and opinions online. • Understanding why some results come before others when searching. • To understand the importance of having a secure password. • To know possible dangers online and to stay safe and use an online community safely. 		<ul style="list-style-type: none"> • Understanding the importance of secure passwords and how to create them. • Developing searching skills to help find relevant information on the internet and showing an understanding of how search engines work. • Evaluating the pros and cons of online communication.
Key Vocabulary:			
<p>appropriate device digital footprint internet trusted adult personal information report screen time sharing online</p>	<p>accuracy advertisement belief bot disadvantage fact sponsored</p>	<p>in-app purchases opinion recommendation reliable screen time search results trustworthy</p>	<p>communication strong password search engine pros and cons</p>

Prior knowledge and skills	Knowledge and Skills to be taught	Next steps
UKS2 Year A Online Safety		
<ul style="list-style-type: none"> • To know that not everything on the internet is true: people share facts, beliefs and opinions online. • To know what social media is and that age restrictions apply. • Understanding why some results come before others when searching. • To reflect on the positives and negatives of time spent online. • To know that privacy settings limit who can access your personal information, such as your name, age, gender etc. • Learning how to create a strong password. • To understand the importance of having a secure password. • 	<ul style="list-style-type: none"> • Understanding the importance of secure passwords and how to create them. • To understand the importance of using different passwords for different online services, and to know some effective strategies for managing those passwords • To explain what to do if they experience bullying online. • Evaluating the pros and cons of online communication. • Developing searching skills to help find relevant information on the internet and showing an understanding of how search engines work. • To know that apps require permission to access private information and that you can alter the permissions. 	
Key Vocabulary:		
<p style="text-align: center;">fact belief search engines search results social media privacy settings secure password</p>	<p style="text-align: center;">advice application app permissions bullying communication judgement</p>	<p style="text-align: center;">mental health mindfulness negative contribution organisation positive contribution</p>

Prior knowledge and skills	Knowledge and Skills to be taught	Next steps
UKS2 Year B Online Safety		
<ul style="list-style-type: none"> • Learning how to create a strong password. • To identify respectful and disrespectful online behaviour. • Reflect on the positives and negatives of time spent online. • To know that privacy settings limit who can access your personal information, such as your name, age, gender etc. • To know that not everything on the internet is true: people share facts, beliefs and opinions online. • Understanding why some results come before others when searching. • To understand the importance of having a secure password. • To know possible dangers online and to stay safe and use an online community safely. • 	<ul style="list-style-type: none"> • To know that apps require permission to access private information and that you can alter the permissions. • To understand how online information can be used to form judgements. • To know some common online scams. • To understand the importance of using different passwords for different online services, and to know some effective strategies for managing those passwords. • To know the positive and negative impacts of sharing online. • Understanding the importance of secure passwords and how to create them. • To explain what to do if they experience bullying online. • Evaluating the pros and cons of online communication. 	
Key Vocabulary:		
<ul style="list-style-type: none"> fact belief search engines search results social media privacy settings secure password 	<ul style="list-style-type: none"> block consent financial information hacking inappropriate malware online bullying online reputation 	<ul style="list-style-type: none"> phishing privacy settings reliable source scammers screenshot software updates two-factor authentication