The Woodlands Primary Computing Curriculum

Our Vision

At Woodlands, we relentlessly strive to be 'Outstanding in All' in order to provide the best opportunities for the children in the community we serve.

We believe in a truly inclusive school where there are no barriers to participation and learning. We are ambitious in our drive to ensure all children achieve the highest outcomes. At Woodlands we believe in working collaboratively with our partners and stakeholders to enable all children to succeed.

Embedding skills for a digital future, building courageous & creative citizens in a technological world.

Our Intent

In today's tech-centric world, computing skills are in demand like never before. At Woodlands, we want to prepare children to be 'future ready' in our increasingly digital world, to give them confidence in technological advancements that are already taking place, such as cloud computing, automation, artificial intelligence and importantly, to be inspire them to enjoy computer science and technology across the curriculum.

The computing curriculum stimulates a range of interests and we want to ignite a love for learning across all areas of computing. That spark kickstarts a personal journey for every child, inspiring them in their future aspirations. As computing technology underpins today's modern lifestyle it is essential that all pupils gain the confidence and ability that they need in this subject, to prepare them for the challenge of a rapidly developing and changing technological world.
The children have many opportunities to use technology. While all the basics IT skills are covered, eg making a simple Word document or using Paint programs, the children's experience soon develops and so at Woodlands children are beginning to blog, make web pages, create computer games and animation. As they go through the school they will explore augmented reality and social networking, coding and generate content for younger children as well. We believe it gives them all the experiences they need to prepare them for 21st century lifestyles.
Not every child will be interested in developing the next *Angry Birds*, but perhaps they are intrigued by the prospect of coding an app that helps bring clean water to communities in need. So, we talk to the children about their interests, and with just a few clicks, they can be leading off into their next passion project!

Whether aged 4, 7, 11, or somewhere in between, we seize every opportunity to encourage their creativity, out-of-the-box thinking, and on-the-spot problem-solving. These are the skills that future recruiters and high-tech employers want to see—the same skills that will empower our children to reach their full potential in school, college, their dream career, and their personal life.

Principles

A high-quality computing education to equip pupils to use computational thinking and creativity to understand and change the world.

1. Develop links with mathematics, science, and design and technology, and provide insights into both natural and artificial systems.
2. Teach the principles of information and computation, how digital systems work, and how to put this knowledge to use through programming.
3. Equip pupils to use information technology to create programs, systems and a range of content.
4. Ensures that pupils become digitally literate – able to use, and express themselves and develop their ideas through, information and communication technology – at a level suitable for the future workplace and as active participants in a digital world.

We are committed to

1. Sharing the wonder and excitement of technology: doing the impossible simply
2. Seeing technology as fundamental now and to access the future: be inspired, creative and innovative
3. Adopting an agnostic and broad approach to devices & technologies
4. Ensuring experience and exposure to industry-standard programs and applications
5. Making the most of the interplay between technology and the wider curriculum, using it as an enabler for all pupils
6. Connecting the classroom to the real world and to innovators and industry
7. Harnessing the power of problem solving and logic
8. Centring on safe practice and strong ethics

As a consequence of adopting these principles, Woodlands pupils will:

- Appreciate the power of technology to change the world
- Recognise technology's ever-changing nature and growth
- Be skilful, creative, confident and self-sufficient users of a wide range of technologies, selecting the right tool for the job
- Be prepared for the future, whatever it looks like
- Be digitally literate, seeing this as an enabler
- Apply their knowledge and skills to the real world and to unfamiliar situations
- Be logical, critical and analytical thinkers who can engineer or reverse-engineer solutions
- Be safe, considered and responsible users of technology

	Curriculum Rationale	Justification if we use the scheme you mentioned

- The Computing Curriculum is designed to give pupils a **practical and connected knowledge of computing and the use of digital technologies** that unlocks the wider curriculum and the world they inhabit
- The knowledge of the curriculum is broken down into three main strands, with appropriate substrands:

  <u>Computer Science</u>
  - Hardware
  - Sending and Receiving
  - Programming

  <u>Information Technology</u>
  - Software
  - Wider Use
  - Data

  <u>Digital Literacy</u>
  - Digital Literacy
- These strands link to the aims of the National Curriculum:
  - *understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems* **[Computer Science]**
  - *can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems* **[Information Technology]**
  - *are responsible, competent, confident and creative users of information and communication technology* **[Digital Literacy]**
- Within the substrands, knowledge is sequenced hierarchically, with attention paid to prior computing knowledge and the knowledge that children will have from other related disciplines, particularly mathematics and science.
- The Computing Curriculum meets and exceeds the content of the National Curriculum, covering all aspects and adding in further depth and knowledge, for example in hardware.
- It is anticipated that to deliver the content of this curriculum, children will require a minimum of 25 learning hours in KS1 and 30 learning hours in KS2. This time will necessarily be aggregated differently due to some being via discrete teaching and some being added to other curriculum subjects to ensure the linked computing knowledge is taught.

dren thrive in this subject because ...

- We encourage our children to enjoy and value the curriculum we deliver. We will constantly ask the WHY behind their learning and not just the HOW. We want learners to discuss, reflect and appreciate the impact computing has on their learning, development and well being. Finding the right balance with technology is key to an effective education and a healthy life-style. We feel the way we implement computing helps children realise the need for the right balance and one they can continue to build on in their next stage of education and beyond. We encourage regular discussions between staff and pupils to best embed and understand this. The way pupils showcase, share, celebrate and publish their work will best show the impact of our curriculum. We also look for evidence through reviewing pupil's knowledge and skills digitally through tools like Google Drive and Seesaw and observing learning regularly. Progress of our computing curriculum is demonstrated through outcomes and the record of coverage in the process of achieving these outcomes.
- Learning in computing will be enjoyed across the school. Teachers will have high expectations and quality evidence will be presented in a variety of forms. Children will use digital and technological vocabulary accurately, alongside a progression in their technical skills. They will be confident using a range of hardware and software and will produce high-quality purposeful products. Children will see the digital world as part of their world, extending beyond school, and understand that they have choices to make. They will be confident and respectful digital citizens going on to lead happy and healthy digital lives.

Knowledge Progression

	Strand	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
COMPUTER SCIENCE	Hardware	• Know what input and output means • Locate the keys on a keyboard • Operate a camera	• Know what a computer is and that is made of different components • Use greater control when taking photos • Type with developing confidence	• Know what the different components of a computer are and how they work together (ROM, RAM, CPU, GPU, Hard Drive)	• Know what a router is/does	• Know that external devices can be added to computers • Know the difference between ROM & RAM • Know how RAM size affects data processing	• Know how computers have evolved over time • Design a computer of the future
	Sending and Receiving			• Know what a server is • Know what a network is/does • Know the difference between wired & wireless • Know how data and files are transferred	• Know the key components of a network • Know that websites are a series of stored files • Know about the role of packets • Know what pixels are in relation to images	• Know that data can be compressed • Know what pixels are in relation to images	• Know how barcodes, QR codes, RFID and bluetooth work • Know about some causes of data corruption
	Program-ming	• Solve an unplugged problem using decomposition • Predict the behaviour of simple programs • Recognise algorithms • Assemble instructions into a simple algorithm • Program a robot to follow a planned route • Debug things when	• Articulate what decomposition means • Decompose a game to predict the algorithm • Know what abstraction means • Explain what an algorithm is • Use loops in an algorithm • Use an algorithm to write a basic program	• Use repetition when programming • Form algorithms independently • Explain the purpose of an algorithm • Use loops to make my code more efficient • Use a systematic approach to debugging, justifying what is wrong and	• Use abstraction to identify the important parts when completing activities • Create algorithms for a specific purpose • Understand that websites can be altered with code • Code a simple game	• Write more complex algorithms for a purpose (conditional code) • Program using variables • Use nested patterns and loops • Use a range of programming commands • Iterate and develop	• Use functions confidently in code • Use experience to solve problems quicker (types and initialisation) • Write increasingly complex algorithms for a purpose (Using Boolean logic) • Use and adapt loops (Using 'while loops')

		they go wrong		how it can be fixed		programming during work (Using 'for loops')	• Make substantial restructures to code (Refactoring)
INFORMATION TECHNOLOGY	**Software**	• Use basic tools to edit graphics • Take and edit photographs • Create digital art • Control a mouse • Use a range of different software/apps	• Have developing word processing skills • Use software/apps to create a story animation • Create and then label an image	• Take photos/video to help tell a story • Add music, sounds and text to my videos • Log in and out of drive account(s) • Communicate over the internet • Attach media in communications	• Build a web page and create content for it • Use software/apps to create documents, presentations, forms and spreadsheets • Work collaboratively with others	• Use software/apps to create music • Use software/apps to create stop motion] • Use 3D design software • Use developed searching skills on the internet • Use search engines effectively, focussing on keywords and search returns • Know what a search engine is/does • Know more than one search engine and can explain why one might be better to use than another	• Use search and word processing skills to create a presentation • Create and edit sound recordings for a purpose • Create and add multiple elements to a video (eg sound, voiceover, text) • Use 3D design software to create a product • Create a website with embedded links and multiple pages • Know how search engines work
	Wider Use	• Search and download from the internet • Know why digital content can be better than paper • Know some uses of technology beyond school	• Know some way computers are used in the wider world	• Know the pros and cons of digital v paper	• Know that software/apps can be used to connect people over the internet and work collaboratively as a team		
	Data	• Put data into tables/charts/pictograms	• Collect then enter data into a spreadsheet • Use technology to interpret data	• Create and interpret graphs and charts • Understand database vocabulary (field, record etc)	• Design a contraption that collects data	• Understand how data is collected	• Create formulas and sorting within a spreadsheet

DIGITAL LITERACY	• Understand the importance of a password • Log in and out of my own account • Know what to do if they see something on the internet that they shouldn't	• Understand how to stay safe when talking to people online • Know that they shouldn't share personal information when online • Know what to do if they see anything that make them feel uncomfortable or upset	• Know how to be a responsible digital citizen • Understand my responsibility to be respectful to others on the internet • Know about cyber bullying • Know that not all communications are genuine; know how to recognise when communications are fake and what to do about them	• Know what appropriate behaviour is when collaborating with others online • Recognise that information on the internet might not be correct and that some sources are more trustworthy than others	• Identify possible dangers online and how to stay safe • Create own resource about digital safety • Know that information on the internet might not be true or correct and they can check validity • Know how to use an online learning community	• Understand the importance of secure passwords and how to create them • Use search engines safely and effectively • Recognise that updated software can help to prevent data corruption and hacking

EYFS

Recommended Teaching Sequence/Map: Summary

Computing			
Three and Four-Year-Olds	Personal, Social and Emotional Development		• Remember rules without needing an adult to remind them.
	Physical Development		• Match their developing physical skills to tasks and activities in the setting.
	Understanding the World		• Explore how things work.
Reception	Personal, Social and Emotional Development		• Show resilience and perseverance in the face of a challenge. • Know and talk about the different factors that support their overall health and wellbeing: - sensible amounts of 'screen time'.
	Physical Development		• Develop their small motor skills so that they can use a range of tools competently, safely and confidently.
	Expressive Arts and Design		• Explore, use and refine a variety of artistic effects to express their ideas and feelings.
ELG	Personal, Social and Emotional Development	Managing Self	• 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	• Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.

& KS2

	KS1	LKS2	UKS2
	Children begin to understand the particular purposes technology can be used for and that by adding text and images you can communicate with technology. Children develop their skills in typing, selecting tools and organising information. **KS1 Computing National Curriculum** Children use technology purposefully to create, organise, store, manipulate and retrieve digital content. Children can: a add text strings, text boxes and show and hide objects and images, manipulating the features; b use various tools, such as brushes, pens, eraser, stamps and shapes, and set the size, colour and shape; c use applications and devices in order to communicate ideas, work, messages and demonstrate control; d save, retrieve and organise work; e use key vocabulary to demonstrate knowledge and understanding in this strand: paint, colour, brush, tools, settings, undo, redo, text, image, size, poster, launch, application, software, window, minimise, restore, size, move, screen, close, click, drag, log on, log off, keyboards, keys, mouse, click, button, double click, drag, present.	Children develop their skills of formatting using keyboard commands, organising their work to demonstrate effect. In LKS2, they will have the opportunity to express themselves more through digital technology, art, PowerPoint and posters. Children should continue to demonstrate control when operating tools as in KS1. **KS2 Computing National Curriculum** Children 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. They 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. Children can: a create different effects with different technological tools, demonstrating control; b use appropriate keyboard commands to amend text on a device; c use applications and devices in order to communicate ideas, work, and messages; d save, retrieve and evaluate work, making amendments; e insert a picture/text/graph/hyperlink from the internet or a personal file; f use key vocabulary to demonstrate knowledge and understanding in this strand: draw, object, shape, line, line colour, fill colour, group, ungroup, font, size, text box, format, image, wrap text, plan, link, image, object, link, hyperlink, minimise, restore, size, move, screen, split, create, organise, file, folder, close, exit, search, print, password, screenshot, snipping tool, shift, undo, redo, menu, dictionary, highlight, cursor, toolbar, spellcheck.	Children begin to look at new software, creating 3D models and learning how to orbit, zoom and develop their editing skills further. They become more confident in inserting links, images and formatting text to create effect. **KS2 Computing National Curriculum** Children 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. Children can: a use the skills already developed to create content using unfamiliar technology; b select, use and combine the appropriate technology tools to create effect; c review and improve their own work and support others to improve their work; d save, retrieve and evaluate their work, making amendments; e insert a picture/text/graph/hyperlink from the internet or personal file; f use key vocabulary to demonstrate knowledge and understanding in this strand: window, layout, text, font, colour, format, heading, hyperlink, 2D shape, 3D shape, orbit, pan, zoom, eraser, dimension, measurement, guide.

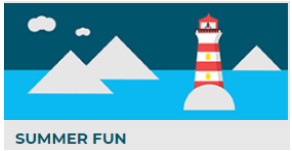
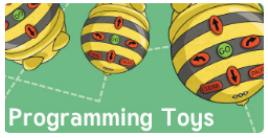
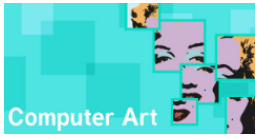
	Children begin to develop their creativity using technology through recording sound. Children will also begin to develop their editing skills and control of the tools. **KS1 Computing National Curriculum** Children use technology purposefully to create, organise, store, manipulate and retrieve digital content. Children can: a use software to record sounds; b change sounds recorded; c save, retrieve and organise work; d use key vocabulary to demonstrate knowledge and understanding in this strand: commands, add sound.	Children develop their editing skills further by cropping, organising and arranging film clips. They are able to share work and offer feedback and ideas for improvement with animation and film, giving their opinion on which software to use. In LKS2, children also look at the history of animation and reflect upon the changes over time. **KS2 Computing National Curriculum** Children 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. Children can: a use software to record, create and edit sounds and capture still images; b change recorded sounds, volume, duration and pauses; c use software to capture video for a purpose; d crop and arrange clips to create a short film; e plan an animation and move items within each animation for playback; f use key vocabulary to demonstrate knowledge and understanding in this strand: audio, sound, video, movie, embed, link, file format, animate, animation, still image, thaumatrope, zoetrope, zoopraxiscope, stereoscope, flip book, frame, onion skinning, loop, frame rate, record, stop, play, stop motion, stop frame.	Children begin to look more into multimedia broadcasting, learning new skills including recording jingles, podcasts and narration. They become more confident in post-production with editing, trimming and refining their work based on plans they have made. **KS2 Computing National Curriculum** Children 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. Children can: a collect audio from a variety of resources including own recordings and internet clips; b use a digital device to record sounds and present audio; c trim, arrange and edit audio levels to improve quality; d publish their animation and use a movie editing package to edit/refine and add titles; e use key vocabulary to demonstrate knowledge and understanding in this strand: audio, record, edit, play stop, skip, waveform, input, output, record, edit, play podcast, digital content, downloadable, backing track, voiceover, mute, gain, production, post-production, documentary, project, evaluation, screening, ceremony, upload.

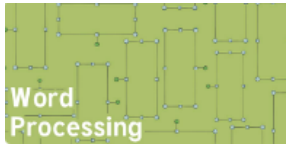
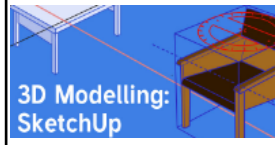
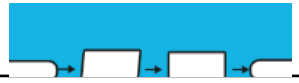
		Children begin to explore expressing information in tables, sorting and organising information for others to be able to understand. **KS2 Computing National Curriculum** Children select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information. Children can: a talk about the different ways data can be organised; b sort and organise information to use in other ways; c search a ready-made database to answer questions; d use key vocabulary to demonstrate knowledge and understanding in this strand: Google Docs, insert, table.	Data Handling in UKS2 focuses on selecting the correct method to display data and using software such as spreadsheets. Children also learn how to check the accuracy of data and compare data for a specific purpose. **KS2 Computing National Curriculum** Children 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. Children can: a construct data on the most appropriate application; b know how to interpret data, including spotting inaccurate data and comparing data; c use keyboard shortcuts and functions to input data on spreadsheets and create formulas for spreadsheets; d add data to an existing database; e use key vocabulary to demonstrate knowledge and understanding in this strand: Google Docs, insert, table, spreadsheet, cell, row, column, formula/formulas, calculate, format, edit, insert, ascending, descending.

Technology in Our Lives	Children begin to make links to how they use technology outside of the classroom. They begin to think about the benefits of using technology in their lives, making links to learning about online safety. KS1 Computing National Curriculum Children recognise common uses of technology beyond school. They use technology safely and respectfully, keeping personal information private; they identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies. Children can: a recognise ways that technology is used in the home and community, e.g. taking photos, blogs, shopping; b use links to websites to find information; c recognise age-appropriate websites; d use safe search filters; e use key vocabulary to demonstrate knowledge and understanding in this strand: filter, Google, search engine, image, keyboard, email, internet, subject, address, communicate, sender, safe, secure.	Children refer to online safety rules when discussing technology in their lives. They are able to navigate between websites and use safe search terms on trusted search engines. They become more confident in using email for communication, including attaching and saving files from emails. KS2 Computing National Curriculum Children 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. They use search technologies effectively, appreciate how results are selected and ranked, and are discerning in evaluating digital content. Children can: a explain ways to communicate with others online; b describe the world wide web as the part of the internet that contains websites; c add websites to a favourites list; d use search tools to find and use an appropriate website and content; e use strategies to improve results when searching online; f use key vocabulary to demonstrate knowledge and understanding in this strand: filter, Google, search engine, image, keyboard, email, subject, address, communicate, sender, safe, secure, internet, world wide web, social media.	Children can use safe search terms on trusted search engines, and evaluate websites based on layout and information. They become more confident in understanding Google rankings, adverts and the reliability of websites. KS2 Computing National Curriculum Children 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. They use search technologies effectively, appreciate how results are selected and ranked, and are discerning in evaluating digital content. Children can: a search for information using appropriate websites and advanced search functions within Google; b use strategies to check the reliability of information (cross-check with another source such as books); c talk about the way search results are selected and ranked; d check the reliability of a website, including the photos on site; e tell you about copyright and acknowledge the sources of information; f use key vocabulary to demonstrate knowledge and understanding in this strand: world wide web, search, search engine, advanced search, results, Google, browser, terms of use, bias, authority, citation, plagiarism, source, website, secure, https, site, domain, website, browser, address bar.

	Children begin to understand their influence on technology by developing their programming skills to determine output. They begin to understand that an algorithm is a series of steps for solving problems and a code is a series of steps that machines can execute. They begin to explore debugging, predicting when codes may not work and changing them. **KS1 Computing National Curriculum** Children understand what algorithms are, how they are implemented as programs on digital devices, and that programs execute by following precise and unambiguous instructions. They create, debug and use logical reasoning to predict the behaviour of simple programs. Children can: a give commands one at a time to control direction and movement, including straight, forwards, backwards, turn; b control the nature of events: repeat, loops, single events and add and delete features; c give a set of instructions to follow and predict what will happen; d improve/change their sequence of commands by debugging; e use key vocabulary to demonstrate knowledge and understanding in this strand: algorithm, instruction, order, debug, program, turn, left, right, clockwise, anticlockwise, blocks, sequence, project, repeat, repeat forever, invisible, grow, shrink.	Children build on their programming skills by solving problems and programming commands to achieve a specific outcome. They begin to write programs, explain algorithms and identify errors in their work. **KS2 Computing National Curriculum** Children design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; they solve problems by decomposing them into smaller parts. They use sequence, selection, and repetition in programs and work with variables and various forms of input and output. They use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs. Children can: a use logical thinking to solve an open-ended problem by breaking it up into smaller parts; b write a program, putting commands into a sequence to achieve a specific outcome; c give a set of instructions to follow and predict what will happen; d keep testing a program and recognise when it needs to be debugged; e use variables to create an effect, e.g. repetition, if, when, loop; f use key vocabulary to demonstrate knowledge and understanding in this strand: decompose, decomposing, logical sequence, flowchart, sprite, block, command, algorithm, answer, correct, errors, program, algorithm, instructions, commands, forward (fd), left (lt), right (rt), move, turn, clear screen (cs), variable.	Children build on their programming skills by using new systems such as a flowchart. They continue to break down problems and create algorithms to solve them. They are able to explain the outcome of an algorithm with confidence and accuracy. **KS2 Computing National Curriculum** Children design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; they solve problems by decomposing them into smaller parts. They use sequence, selection, and repetition in programs and work with variables and various forms of input and output. They use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs. Children can: a use external triggers and infinite loops to demonstrate control; b follow a sequence of instructions, e.g. in a flowchart and modify a flowchart using symbols; c use conditional statements and edit variables; d decompose a problem into smaller parts to design an algorithm for a specific outcome and use this to write a program; e keep testing a program and recognise when it needs to be debugged; f use key vocabulary to demonstrate knowledge and understanding in this strand: flowchart, algorithm, control, output, symbol, start, stop, delay, process, decision, loop, backdrop, script, block, repeat, commentary, sequence, consequence, debug, program, Kodu, world, object, tool palette, program environment, smooth, flatten, raise.

	Children begin to consider their activity on the internet and learn about ways to keep themselves safe and why it is important to do so. They also compare appropriate and inappropriate activity on the internet and decide what to do next. **KS1 Computing National Curriculum** Children can use technology safely and respectfully, keeping personal information private; they identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies. Children can: a identify what things count as personal information; b identify what is appropriate and inappropriate behaviour on the internet; c agree and follow sensible online safety rules, e.g. taking pictures, sharing information, storing passwords; d seek help from an adult when they see something that is unexpected or worrying; e demonstrate how to safely open and close applications and log on and log off from websites; f use key vocabulary to demonstrate knowledge and understanding in this strand: safe, meet, accept, reliable, tell, online, trusted, adult, information, safety, personal, key, question, tell, safe, share, stranger, danger, internet.	Children become more aware of their digital footprint by reflecting on their experience on the internet. They are able to understand more about age-appropriate websites and adverts and how adverts are used by companies. Children are also introduced to the concept of plagiarism and citation. **KS2 Computing National Curriculum** Children use technology safely, respectfully and responsibly. They recognise acceptable/unacceptable behaviour and identify a range of ways to report concerns about content and contact. Children can: a reflect on their own digital footprint and behaviour online; b identify what is appropriate and inappropriate behaviour on the internet, recognising the term cyberbullying; c agree and follow sensible online safety rules, e.g. taking pictures, sharing information, storing passwords; d seek help from an adult when they see something that is unexpected or worrying; e demonstrate understanding of age-appropriate websites and adverts; f use key vocabulary to demonstrate knowledge and understanding in this strand: safe, meet, accept, reliable, tell, online, trusted, adult, information, safety, personal, internet, world wide web, communicate, message, social media, email, password, cyberbullying/bullying, plagiarism, profiles, account, private, public.	Children are encouraged to identify online risks and share their knowledge of the risks and consequences for people online. They begin to think more critically about what they see online and look at the concept of fake news and false photographs. **KS2 Computing National Curriculum** Children use technology safely, respectfully and responsibly. They recognise acceptable/unacceptable behaviour and identify a range of ways to report concerns about content and contact. Children can: a protect their password and other personal information; b be a good online citizen and friend; c judge what sort of privacy settings might be relevant to reducing different risks; d seek help from an adult when they see something that is unexpected or worrying; e discuss scenarios involving online risk; f use key vocabulary to demonstrate knowledge and understanding in this strand: spam, link, privacy, virus, scam, phishing, inbox, junk, sender, subject, secure, safe, account, online, private, social media, adverts, cyberbullying, reporting, anonymous, victim, fraud/fraudulent, policy, private/personal.

	Term 1	Term 2	Term 3
EYFS https://www.barefootcomputing.org/earlyyears	 	 	
Year 1	 	  	 
Year 2	  	  	 

Year 3	 	  	 
Year 4	 	 	 
Year 5	 	 	  

Year 6