

# Willow Wood Community Nursery and Primary School Computing Skills and Vocabulary Progression

#### Skills Progression

The core of computing is computer science, in which pupils are taught the principles of information and computation, how digital systems work and how to put this knowledge to use through programming. Building on this knowledge and understanding, pupils are equipped to use information technology to create programs, systems and a range of content. Computing also ensures that pupils become digitally literate – able to use, and express themselves and develop their ideas through, information and communication technology – at a level suitable for the future workplace and as active participants in a digital world.

Online Safety is taught progressively, via Purple Mash and additionally forms part of a responsive curriculum to keep children safe at Willow Wood. Safer Internet Day creates another opportunity to interact with online safety resources and age-appropriate texts.

#### Vocabulary Progression

The vocabulary which pupils are taught is repetitive and progressive, aligned with Purple Mash work units. Pupils will experience a computing vocabulary which is not only audible but also visual, as they use avatars to navigate tool bars and identify and name Purple Mash icons and logos. Mastery of computing requires exposure to a rich vocabulary, heard in many contexts, meaning teaching is not limited to the vocabulary listed here. As pupils leave Willow Wood, we aim for them to talk about working digital systems, to reflect their understanding of information technology as they create content and through experiences of programming, discuss computer science. Pupils should be digitally literate, understanding and expressing how to stay safe in the technological world.

# <u>Early Years</u>

	Personal, Social and Emotional: Managing Self				
	Explain the reasons for rules, know right from wrong and try to behave accordingly				
Early	Communication and Language: Listening, attention and understanding				
Learning Goals	Make comments about what they have heard and ask questions to clarify their understanding.				
	Expressive Arts and Design: Creating with	<u>materials</u>			
	Safely use and explore a variety of materio	ıls, tools and techniques, experimentin	g with colour, design, texture, f	orm and function.	
	Share their creations, explaining the proce	ss they have used.			
	Skills linked to Computer Science	Skills linked to Information Technolo	<u>ogy</u>	Skills linked to Digital Literacy	
	Develop the fine-motor/hand-eye co-	Use tracker pad with increasing cont	trol to point, click and move.	Identify some simple examples of personal information (name,	
	ordination to make on-screen selections.  Use tracker pad to click, drag and dro		op.	address, birthday and age for example.	
Early Years Foundation	Name items we control in the everyday environment.	Use on screen simulations and compare with real life activities — e.g, to support online safety. Mark-make using touch e.g, interactive boards/ipads. Use a paint package to draw a picture using a range of devices e.g. Paint, 2Paint a picture. Save work in digital tray. Use simple tools in a painting package e.g. different sized brushes, colour-fill, and palette.		With support, simplistically identify rules for safer technology use.	
Stage	Talk about everyday technology.			Describe ways that some people can be unkind online.	
	Explore on screen activities.			Have ideas of how they (might) use technology to communicate (including via role-play, discussion and tinker	
	Explore cause and effect by clicking.			trays).	
	Use robots to explore logical processing and predictions.			Name the parts of hardware with which they interact e.g, screen, keypad, tracker pad.	
	Click and drag activities using finger.	Find the letters in name on a compu	ter keuhoard to tune name	Talk about how we can use the internet to find things out.	
		,	3	Talk about devices that access the internet.	
Vocabulary	computer/laptop, screen, control, move, touch, keyboard, letters, click, tracker pad, point, cursor, drag, drop, internet, name, address, birthday, password, Purple Mash/Mini  Mash.				
		Safer Int	ernet Day		
	Early Years Foundation S	tage 1		Early Years Foundation Stage 2	
Upsetting co	Smartie the Penguin story power point – Book A Upsetting content & personal information (age 3-5) Childnet		Jessie and Friends - Watching Videos (age 4-5) CEOP https://youtu.be/YtOus2O3 Jk		
	(age 3-5) Childnet https://www.childnet.com/resources/smartie-the-penguin/		Smartie the Penguin story power point – Book B Adverts, searching online & bullying (age 3-5) Childnet <a href="https://www.childnet.com/resources/smartie-the-penguin/">https://www.childnet.com/resources/smartie-the-penguin/</a>		

# <u>Key stage 1</u>

### Computer Science

NC objective - Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions			
Year 1	Year 2		
<ul> <li>Children understand that an algorithm is a set of instructions used to solve a problem or achieve an objective.</li> <li>They know that an algorithm written for a computer is called a program.</li> </ul>	<ul> <li>Children can explain that an algorithm is a set of instructions to complete a task.</li> <li>When designing simple programs, children show an awareness of the need to be precise with their algorithms so that they can be successfully converted into code.</li> </ul>		
Covered in: 1.2 Grouping and Sorting Mash (2DIY) 1.4 Lego Builders (2Quiz/2Go) 1.5 Maze Explorers (2Go) 1.7 Coding (2Code)	Covered in: 2.1 Coding (2Code)		
NC objective – Create and debug simple programs			
Year 1  • Children know that an unexpected outcome is due to code they have created and can make logical attempts to fix the code.  Covered in:  1.4 Lego Builders (2Quiz/2Go)  1.5 Maze Explorers (2Go)  1.7 Coding (2Code)	Year 2  • Children can create a simple program that achieves a specific purpose. • They can also identify and correct some errors. • Children's program designs display a growing awareness of the need for logical, programmable steps.  Covered in: 2.1 Coding (2Code)		
NC objective – Use logical reasoning to predict the behaviour of simple programs			
Year 1	Year 2		
<ul> <li>When looking at a program, children can read code one line at a time and make good attempts to envision the bigger picture of the overall effect of the program.</li> <li>Children can, for example, interpret where the turtle in 2Go challenges will end up at the end of the program.</li> <li>Covered in:         <ul> <li>1.4 Lego Builders (2Quiz/2Go)</li> <li>1.5 Maze Explorers (2Go)</li> <li>1.7 Coding (2Code)</li> </ul> </li> </ul>	<ul> <li>Children can identify the parts of a program that responds to specific events and initiate specific actions.</li> <li>For example, they can write a cause and effect sentence of what will happen in a program.</li> <li>Covered in:</li> <li>2.1 Coding (2Code)</li> </ul>		
	ence Vocabulary		
1.2 sort, criteria, describe, more than, less than, equal, groups, algorithm 1.4 program, machine, computer, recipe, debugging, code, sequence. 1.5 direction, forwards, backwards, left, right, keys, challenge, undo, rewind, route, delete, command, unit, algorithm, debug. 1.7 instructions, algorithm, code, programmer, coding, software, code blocks, object, action, 2Do, command, design view, code view, debug\ debugging, run, scene, plan, properties, background.	2.1 instruction, algorithm, event, object, action, command, scene, background, properties, scale, click events, collision detection, predict, interaction, collision detection event, collision detection action, image, implement, timer, interval, sequence, output, properties, turtle object, when key event, when swiped event, when clicked event, button, object name, test, bug, debugging.		

# Information Technology

NC objective – Use technology purposefully to create, organise, store, manipulate and retrieve	digital content	
Year 1	Year 2	
<ul> <li>Children are able to sort, collate, edit and store simple digital content.</li> <li>For example, children can name, save and retrieve their work and follow simple instructions to access online resources.</li> <li>Covered in:         <ul> <li>1.3 Pictograms (2count)</li> <li>1.5 Maze Explorers (2Go)</li> <li>1.6 Animated Storybooks (2create a story)</li> <li>1.7 Coding (2Code)</li> <li>1.8 Spreadsheets (2Calculate)</li> </ul> </li> </ul>	<ul> <li>Children can retrieve specific data for conducting simple searches.</li> <li>Children are able to edit more complex digital data such as music compositions.</li> <li>Children are confident when creating, naming, saving and retrieving content.</li> <li>Children use a range of media in their digital content including photos, text and sound.</li> <li>Covered in:         <ul> <li>2.3 Spreadsheets (2Calculate)</li> <li>2.5 Effective Searching (Browser, 2Quiz, Writing Templates)</li> <li>2.6 Creating Pictures (2Paint a picture/Writing Templates)</li> <li>2.7 Making Music (2Sequence)</li> <li>2.8 Presenting ideas (2Connect/2Quiz)</li> </ul> </li> <li>Coverage and Links to KCSIE's 4 C's:         <ul> <li>Conduct.</li> <li>Managing information online</li> </ul> </li> </ul>	
Information Tech	nology Vocabulary	
1.3 program, machine, computer, recipe, debugging, code, sequence. 1.6 e-book, sound, eraser, undo, redo, paint tools, text, save, overwrite, animation, play mode, sound effect, voice recording, drop-down menu, category, background, clip art gallery, font, copy, paste, edit, features. 1.8 spreadsheet, data, row, column, cell, delete, calculations, button, clip-art, image, move cell, lock cell, select, count tool, speak tool, value.	2.3 <row, cell,="" column,="" drag,="" image="" toolbox,="" value="">, count tool, speak tool, cut, copy, paste, total, price, coins, equals, addition, equals tool, data, table, block graph, .label 2.6 clip art, stamps, art, palette. Line, fill, style, rotated, diagonal, horizontal, vertical, parallel. 2.7 tune, compose, note, speed, beats, volume, tempo, sound effect, repeat, bars, soundtrack. 2.8 quiz, multiple choice, e-book, mind map, node, fiction, non-fiction, fact-file, presentation,</row,>	

# **Digital Literacy**

NC objective – Recognise common uses of information technology beyond school			
Year 1	Year 2		
<ul> <li>Children understand what is meant by technology and can identify a variety of examples both in and out of school.</li> <li>They can make a distinction between objects that use modern technology and those that do not e.g. a microwave vs a chair.</li> <li>Covered in:</li> <li>1.9 Technology outside school (Writing templates/2Publish)</li> </ul>	<ul> <li>Children can effectively retrieve relevant, purposeful digital content using a search engine.</li> <li>They can apply their learning of effective searching beyond the classroom.</li> <li>They can share this knowledge.</li> <li>Children make links between technology they see around them coding and multimedia work they do in school.</li> <li>Covered in:</li> <li>2.5 Effective Searching (Internet)</li> <li>Coverage and Links to KCSIE's 4 C's:</li> <li>Conduct.</li> <li>Managing online information</li> </ul>		

NC objective – Use technology safely and respectfully, keeping personal information private; identified the internet or other online technologies	entify where to go for help and support when they have concerns about content or contact on		
Year 1	Year 2		
<ul> <li>Children understand the importance of keeping information, such as their usernames and passwords, private and actively demonstrate this in lessons.</li> <li>Children take ownership of their work and save this in their own private space such as their My Work folder on Purple Mash.</li> <li>Covered in:</li> <li>1.1 Online Safety and Exploring Purple Mash (Avatar creator, 2Paint, 2publish, writing templates, 2Count, 2explore)</li> </ul>	<ul> <li>Children know the implications of inappropriate online searches.</li> <li>Children begin to understand how things are shared electronically.</li> <li>They develop an understanding of using email safely by using 2Respond activities Purple Mash and know ways of reporting inappropriate behaviours and content to trusted adult.</li> <li>Covered in:</li> <li>2.2 Online Safety (Writing templates, display boards, 2Respond on 2Email)</li> </ul>		
Coverage and Links to KCSIE's 4 C's: Content, contact, conduct. Online Reputation Managing online information Privacy and security Copyright & ownership Self-image and identity	Coverage and Links to KCSIE's 4 C's: Content, contact, conduct. Self-image and identity Online relationships Online reputations Privacy and security		
Digital Litera	cy Vocabulary		
1.1 login, password, private, home screen, work area, avatar, icon, typing, saving, log out, alert, notification, communication, device, search, filter, shared folders, filename, Topic Area, writing template, textbox, toolbar, menu, think about box, Purple Mash Tools, button.	2.2 search, filter, internet, sharing, display board, email, attachment, reply, personal information, private information, protection, identifying, secure. 2.5 internet, World Wide Web, network, device, web page, browser, website, domain, web address, URL, search engine, digital footprint.		
Safer Int	ernet Day		
Year 1	Year 2		
Jessie and friends – Sharing Pictures (age 5-6) CEOP <a href="https://youtu.be/87eWLOWAnyw">https://youtu.be/87eWLOWAnyw</a>	Block him right good! Film 1 (CEOP) https://www.ceopeducation.co.uk/8_10/watch/		
Jessie and friends – Playing Games (age 6-7) CEOP <a href="https://www.ceopeducation.co.uk/parents/jessie-and-friends-videos/">https://www.ceopeducation.co.uk/parents/jessie-and-friends-videos/</a>	Chicken Clicking – Internet Safety Story - By Jeanne Willis and Tony Ross <a href="https://youtu.be/FSasSWwi5Tk">https://youtu.be/FSasSWwi5Tk</a>		

### Key Stage 2

#### **Computer Science**

Year 3

NC objective – Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts

Year 5

Year 6

Year 4

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<ul> <li>Children can turn a simple real life situation into an algorithm for a program by deconstructing it into manageable parts.</li> <li>Their design shows that they are thinking of the desired task and how this translates into code.</li> <li>ChildTren can identify an error within their program that prevents it following the desired algorithm and then fix it.</li> <li>Covered in:</li> <li>3.1 Coding (2Code)</li> </ul>	<ul> <li>When turning a real-life situation into an algorithm, the children's design shows that they are thinking of the required task and how to accomplish this in code using coding structures for selection and repetition.</li> <li>Children make more intuitive attempts to debug their own programs.</li> <li>Covered in:</li> <li>4.1 Coding (2Code) 4.5 Logo (2Logo)</li> </ul>	com algo decc part • Chil thei logic app need spec Covered in: 5.1 Coding (2	dren are able to test and debug r programs as they go and can use cal methods to identify the roximate cause of any bug but may d some support identifying the cific line of code.	<ul> <li>Children are able to turn a more complex programming task into an algorithm by identifying the important aspects of the task and then decomposing them in a logical way using their knowledge of possible coding structures and applying skills from previous programs.</li> <li>Children test and debug their program as they go and use logical methods to identify the cause of bugs, demonstrating a systematic approach to try to identify a particular line of code causing a problem.</li> <li>Covered in:</li> <li>6.1 Coding (2Code</li> </ul>	
NC objective – Use sequence, selection and r	enetition in programs: work with variable		orms of input and output		
Year 3	Year 4	ana vantous je	Year 5	Year 6	
Children demonstrate the ability to		hieve	Children can translate	Children translate algorithms that	
design and code a program that follows a simple sequences.  They experiment with timers to achieve repetition effects in their programs.  Children are beginning to understand the difference in the effect of using a timer command rather than a repeat command when creating repetition effects.  Children understand how variable can be used to store information while a program is executing.  Covered in: 3.1 Coding (2Code) 3.10 Physical Devices: Micro Bits (Free Code)	repetition effects are becomin logical and are integrated in program designs.  • They understand 'if statement selection and attempt to community with other coding structures variables to achieve the effect design in their programs.  • As well as understanding hose can be used to store informates program is executing, they are use and manipulate the valuation variables.  • Children can make use of use and outputs.  Covered in:  4.1 Coding (2Code)  4. 11 Physical Devices: Micro Bits (Freedome)	ng more to their  ats' for white these including ts that they w variables tion while a re able to e of er inputs	algorithms that include sequence, selection and repetition into code with increasing ease and their of designs show that they are thinking of how to accompand the set task in code utilising such structures.  They are combining sequent selection and repetition wire other coding structures to achieve their algorithm de Covered in:  5.1 Coding (2Code)	include sequence, selection and repetition into code and their own designs show that they are thinking of how to accomplish the set task in code utilising such structures, including nesting structures within each other.  • Coding displays an improving understanding of variables in coding, outputs such as sound and movement, inputs from the user of the program such as button clicks and the value of functions.  Covered in: 6.1 Coding (2Code 6.5 Text Adventures (2Publish template, 2Code, 2Chart, 2Blog)	
	NC objective – Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs				
Year 3	Year 4		Year 5	Year 6	
<ul> <li>Children's designs for their programs show that they are</li> </ul>	<ul> <li>Children's designs for their programs show that they are</li> </ul>	2	<ul> <li>When children code, they are beginning to think about their of</li> </ul>	Children are able to interpret a program in parts and can make	

thinking	of the structure of a
program	in logical, achievable steps
and abso	rbing some new
knowledg	e of coding structures. For
	'if' statements, repetition
and vario	

- They make good attempts to 'step through' more complex code in order to identify errors in algorithms and can correct this.
- In programs such as Logo, they can 'read' programs with several steps and predict the outcome accurately.

Covered in:

3.1 Coding (2Code)

3.10 Physical Devices: Micro Bits (Free Code)

thinking of the structure of a program in logical, achievable steps and absorbing some new knowledge of coding structures. For example, 'if' statements, repetition and variables.

- They can trace code and use stepthrough methods to identify errors in code and make logical attempts to correct this.
- In programs such as Logo, they can 'read' programs with several steps and predict the outcome accurately.

Covered in:

4.1 Coding (2Code)

4. 11 Physical Devices: Micro Bits (Free Code)

structure in terms of the ability to debug and interpret the code later, e.g. the use of tabs to organise code and the naming of variables.

Covered in:

5.1 Coding (2Code)

logical attempts to put the separate parts of a complex algorithm together to explain the program as a whole.

Covered in:

6.1 Coding (2Code)

6.5 Text Adventures (2Publish template, 2Code, 2Chart, 2Blog)

NC objective – 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.

Year 3      Children can list a range of ways that the internet can be used to provide different methods of communication.      They can use some of these methods of communication, e.g. being able to open, respond to and attach files to emails using 2Email.      They can describe appropriate email	Year 4  Children recognise the main component parts of hardware which allow computers to join and form a network.  Their ability to understand the online safety implications associated with the ways the internet can be used to provide different methods of communication	Year 5  Children understand the value of computer networks but are also aware of the main dangers. They recognise what personal information is and can explain how this can be kept safe. Children can select the most appropriate form of online communications contingent on	Year 6  Children understand and can explain in some depth the difference between the internet and the World Wide Web. Children know what a WAN and LAN are and can describe how they access the internet in school. Covered in: 6.2 Online Safety (2DIY 3D, 2Code and
conventions when communicating in this way. Covered in: 3.5 Email including email safety (2Email) – vocabulary in Digital Literacy .	is improving. Covered in: 4.2 Online Safety (2Connect for mind maps, 2Publish+, display boards) 4.7 Effective Searching (Browser, 2Quiz and 2Connect for mind maps) 4.8 Hardware investigators (2Quiz, 2Publish, 2Connect)	audience and digital content, e.g. 2Blog, 2Email, Display Boards. Covered in: 5.2 Online Safety (2Publish+, 2Connect for mind maps)	2Blog) 6.4 Blogging (2Blog)
	Computer Scie	nce Vocabulary	
Year 3	Year 4	Year 5	Year 6

3.1 algorithm, background, object, predict, implement, run, flowchart, properties, when clicked, when key, timer, sequence, nested, repeat, input, command, button, right-angle, degrees, nesting, test, debug, actions, object type, alert.

3.10 hardware. LED, repeat, program, software, animation, image, infinite loop, output, sequence, data, input, selection, accelerometer, gestures, sound output, speaker.

4.1 background, button, object, properties, code block, predict, event, debugging, action, selection, if statement, decision, command, coordinate, flow chart, repeat until, if/else statement, inputs, execute, variable, number variable, alert, prompt.

4.8 hardware, software, components, peripherals, motherboard, CPU, RAM, hard drive, graphics card, network card, monitor, keyboard, input, output, mouse.

4.11accelerometer, data, sensor, variable, infinite loop, logic, light sensor, conditionals, gestures, selection, simulation.

range of software.

5.1 event, key press, collision, object, action, variable, selection, if/else statements, coordinates, simplify, efficient, computergenerated variable, simulation, physical systems, algorithm, properties, string, values, tabs, text variable, collision, when key, random, output, concatenation, print to screen, tabs, if statement.

5.5 evaluation, themes, scenes, textures,

They objectively review solutions

from others.

images, screenshot, quest, instructions,

feedback, promotion.

6.1 algorithm, action, output, selection, variables, repeat, timer, launch command, debug, alert, string, x and y properties, coordinates, decomposition, object, event, function, turtle object, text object, execute, function call, tabs, input, concatenation.
6.5 text adventure, sprite, link, functions, selection, variables, repeat, step through, flow control, QR code, debugging.

They are able to use criteria to

evaluate the quality of digital

#### Information Technology

given task.

NC objective – Use search technologies effective	ely, appreciate how results are selected and rank	ed, and be discerning in evaluating digital conte	nt.
Year 3	Year 4	Year 5	Year 6
<ul> <li>Children can carry out simple searches to retrieve digital content.</li> <li>They understand that to do this, they are connecting to the internet and using a search engine such as Purple Mash search or internet-wide search engines.</li> <li>Covered in:</li> <li>3.3 Spreadsheets (2Calculate)</li> <li>3.5 Email including email safety (2Email)</li> <li>3.6 Branching Databases (2Question)</li> </ul>	<ul> <li>Children understand the function, features and layout of a search engine.</li> <li>They can appraise selected webpages for credibility and information at a basic level.</li> <li>Covered in:</li> <li>4.7 Effective Searching (Browser, 2Quiz and 2Connect for mind maps)</li> <li>Coverage and Links to KCSIE's 4 C's: Conduct, content.</li> </ul>	<ul> <li>Children search with greater complexity for digital content when using a search engine.</li> <li>They are able to explain in some detail how credible a webpage is and the information it contains.</li> <li>5.5 Game Creator (2DIY 3D,2Publish, templates)</li> <li>S.8 Word processing (MS Word)</li> </ul>	<ul> <li>Children readily apply filters when searching for digital content.</li> <li>They are able to explain in detail how credible a webpage is and the information it contains.</li> <li>They compare a range of digital content sources and are able to rate them in terms of content quality and accuracy.</li> <li>Children use critical thinking skills in everyday use of online communication.</li> <li>Covered in:</li> <li>6.2 Online Safety (2DIY 3D, 2Code and 2Blog)</li> <li>6.9 Spreadsheets (2calculate)</li> </ul>
		range of digital devices to design and create a ra	nge of programs, systems and content that
accomplish given goals, including collecting, a	nalysing, evaluating and presenting data and in	formation	
Year 3	Year 4	Year 5	Year 6
<ul> <li>Children can collect, analyse, evaluate and present data and information using a selection of software, e.g. using a branching database (2Question).</li> <li>Children can consider what software is most appropriate for a</li> </ul>	<ul> <li>Children are able to make improvements to digital solutions based on feedback.</li> <li>Children make informed software choices when presenting information and data.</li> <li>They create linked content using a</li> </ul>	<ul> <li>Children are able to make appropriate improvements to digital solutions based on feedback received and can confidently comment on the success of the solution. e.g. creating their own program to meet a design brief using 2Code.</li> </ul>	<ul> <li>Children make clear connections to the audience when designing and creating digital content.</li> <li>The children design and create their own blogs to become a content creator on the internet, e.g. 2Blog.</li> </ul>

<ul> <li>They can create purposeful content to attach to emails, e.g. 2Respond.</li> <li>Covered in:</li> <li>3.3 Spreadsheets (2Calculate)</li> <li>3.5 Email including email safety (2Email/2Connect)</li> <li>3.6 Branching Databases (2Question)</li> <li>3.8 Graphing (2Graph, 2Survey, 2Publish)</li> </ul>	<ul> <li>Children share digital content within their community, i.e. using Virtual Display Boards.</li> <li>Covered in:</li> <li>4.1 Coding (2Code)</li> <li>4.3 Spreadsheets (2Calculate)</li> <li>4.6 Animation (2Animate)</li> </ul>	They are able to use several ways of sharing digital content, i.e. 2Blog, Display Boards, 2Email, Microsoft Word and PowerPoint.  Covered in: 5.1 Coding (2Code) 5.3 Spreadsheets (2Calculate) 5.5 Game Creator (2DIY 3D,2Publish, templates)	solutions and are able to identify improvements, making some refinements.  Covered in: 6.1 Coding (2Code) 6.9 Spreadsheets (2calculate) 6.4 Blogging (2Blog) 6.5 Text Adventures (2Publish template,
3.0 Orapiting (20raph, 25arveg, 2r abitsh)		5.6 3D Modelling (2Design/2Make)	2Code, 2Chart, 2Blog)
		5.8 Word processing (MS Word)	6.7 Quizzing (2Quiz, 2Blog, 2Investigate)
	Information Tech	nology Vocabulary	
Year 3	Year 4	Year 5	Year 6
3.3 pie chart, data, table, bar graph, spinner tool, more/less than/equal tool, advanced mode, cell address, quiz mode. 3.6 data, database, branching database, binary tree, debugging.	4.3formula wizard, percentages, decimal place, format cell, average, equal tool, random number tool, spinner tool, timer, line graph, data, chart, resize, budget, totals, calculations, place value, is equals to tool, set image. 4.6 animation, frame, fps (frames per second), pause, onion skinning, stop motion.	5.3 formula, formulae, conversion, advanced mode, copy paste, how many tool, variable, perimeter, area, modelling, text area, cell format, totalling tool, budget, profit. 5.6 net, template, 3D view, pattern tool, points, design brief, 3D printing. 5.8 word processing tool, document, front screen, zoom, selecting highlighting, font, formatting, page orientation, copy and paste, copyright, creative commons, attributing, image editing, image transparency, cropping, text wrapping, styles, bulleted list, numbered list, drop capital, caption, hyperlink, word art, merge cells, column, row, distributing columns, grammar check, spell check, template.	6.3 count tool, dice tool, chart, formula wizard, computational mode, percentage, format, move tool, advanced mode, budget, profit, expenses. 6.7 quiz, copy/paste, selfie, undo/redo, audio, clipart, image filter, preview, case-sensitive, cloze, database, record, field, statistics, data, survey, participants, data analysis.

# <u>Digital Literacy</u>.

NC objective – Use technology safely, respectfully and responsibly; recognise acceptable/ unacceptable behaviour; identify a range of ways to report concern about content and contact				
Year 3	Year 4	Year 5	Year 6	
<ul> <li>Children demonstrate the importance of having a secure password and not sharing this with anyone else.</li> <li>Furthermore, children can explain the negative implications of failure to keep passwords safe and secure.</li> <li>They understand the importance of staying safe and the importance of their conduct when using familiar communication</li> </ul>	<ul> <li>Children can explore key concepts relating to online safety using concept mapping such as 2Connect.</li> <li>They can help others to understand the importance of online safety.</li> <li>Children know a range of ways of reporting inappropriate content and contact.</li> <li>Covered in:</li> <li>4.2 Online Safety (Internet, 2Publish, 2Quiz)</li> <li>Coverage and Links to KCSIE's 4 C's:</li> </ul>	<ul> <li>Children have a secure knowledge of common online safety rules and can apply this by demonstrating the safe and respectful use of a few different technologies and online services.</li> <li>Children implicitly relate appropriate online behaviour to their right to personal privacy and mental wellbeing of themselves and others.</li> <li>Covered in:</li> <li>5.2 Online Safety (Internet, 2Publish, 2Quiz)</li> <li>Coverage and Links to KCSIE's 4 C's:</li> </ul>	<ul> <li>Children demonstrate the safe and respectful use of a range of different technologies and online services.</li> <li>They recognise the value in preserving their privacy when online for their own and other people's safety.</li> <li>Covered in:</li> <li>6.2 Online Safety (2Investigate, 2Pubhlish, 2Template)</li> <li>6.4 Blogging (2Blog)</li> </ul>	
tools such as 2Email.	Content, content, conduct. Self-image and identity	Content, content, conduct.	Coverage and Links to KCSIE's 4 C's: Content, contact, conduct, commerce.	
	Seij-iniage and identity	Content, content, contudet.	content, contact, contact, continerce.	

They know more than one way to report unacceptable content and contact.  Covered in: 3.2 Online Safety 2Publish, 2Blog, 2Write) 3.5 Email including email safety (2Email, 2Connect)  Coverage and Links to KCSIE's 4 C's: Content, contact, conduct, commerce. Online relationships Online reputation Managing online information Health, wellbeing and lifestyle Privacy and security	Online relationships Online reputations Online bullying Managing online information Copyright and ownership	Self-image and identity Online bullying Managing information online Privacy and security	Self-image and identity Online reputation Online relationships Health, wellbeing and lifestyle Privacy and security
	fully and responsibly; recognise acceptable/ unac	ceptable behaviour; identify a range of ways to re	port concern about content and contact
Year 3	Year 4	Year 5	Year 6
<ul> <li>Children demonstrate the importance of having a secure password and not sharing this with anyone else.</li> <li>Furthermore, children can explain the negative implications of failure to keep passwords safe and secure.</li> <li>They understand the importance of staying safe and the importance of their conduct when using familiar communication tools in Purple Mash.</li> <li>They know more than one way to report unacceptable content and contact.</li> <li>Covered in:</li> <li>3.2 Online Safety (2Connect for mind maps, 2Blog, writing templates, display board)</li> <li>3.5 Email including email safety (2Email)</li> <li>3.9 Presenting (MS PowerPoint)</li> <li>Coverage and Links to KCSIE's 4 C's:</li> <li>Content, contact, conduct, commerce.</li> <li>Online reputation</li> <li>Managing online information</li> <li>Health, wellbeing and lifestyle</li> </ul>	<ul> <li>Children can explore key concepts relating to online safety.</li> <li>They can help others to understand the importance of online safety.</li> <li>Children know a range of ways of reporting inappropriate content and contact.</li> <li>Covered in:         <ul> <li>4.2 Online Safety (Internet, 2Publish, 2Quiz)</li> </ul> </li> <li>Coverage and Links to KCSIE's 4 C's:         <ul> <li>Content, content, conduct.</li> </ul> </li> <li>Self-image and identity         <ul> <li>Online relationships</li> <li>Online bullying</li> <li>Managing online information</li> <li>Copyright and ownership</li> </ul> </li> </ul>	<ul> <li>Children have a secure knowledge of common online safety rules and can apply this by demonstrating the safe and respectful use of a few different technologies and online services.</li> <li>Children implicitly relate appropriate online behaviour to their right to personal privacy and mental wellbeing of themselves and others.</li> <li>Covered in: 5.2 Online Safety (2Publish+, writing templates, 2Connect)</li> <li>Coverage and Links to KCSIE's 4 C's:         <ul> <li>Content, content, conduct.</li> </ul> </li> <li>Self-image and identity</li> <li>Online bullying</li> <li>Managing information online</li> <li>Privacy and security</li> </ul>	Children demonstrate the safe and respectful use of a range of different technologies and online services. They recognise the value in preserving their privacy when online for their own and other people's safety. Covered in: 6.2 Online Safety (2Investigate, 2Publish, 2Template) 6.4 Blogging (2Blog)  Coverage and Links to KCSIE's 4 C's: Content, contact, conduct, commerce. Self-image and identity Online reputation Online relationships Health, wellbeing and lifestyle Privacy and security
Privacy and security	Digital Litera	acy Vocabulary	
Year 3	Year 4	Year 5	Year 6

3.2 password, personal information, vlogs,			
permission, appropriate, internet, website,			
spoof, verify, reputable source,			
inappropriate.			

3.5 communications, mind mapping, node, link, email, compose, address book, inbox, trusted contact, personal information, password, save to draft, attachment, CC-carbon copy, BCC-blind carbon copy.

4.2 report, SMART rules, spam, phishing, attachment, digital footprint, malware, software, virus, adfly, ransom ware, cookies, plagiarism, watermark, citation, copyright, collaboration, data analysis, collaborative database.

4.7 search engine, results page, internet, key words, reliability, easter eggs, balanced view.

5.2 string, variables, values, tabs, text variable, collision, when key, random, output, concatenation, print to screen, tabs, if statement, if/else statement, responsibility, SMART rules, encrypt, critical thinking, image manipulation, avatar, citation, validity, plagiarism, bibliography, copyright, creative commons licence, communication.

6.2 secure websites, location sharing, spoof websites, phishing, password, PEGI, digital footprint, inappropriate, print screen, screen time, data analysis.
6.4 blog, vlog, archive, blog post, collaborate, nodes, connections, commenting, approval.

#### Safer Internet Day

Year 3	Year 4	Year 5	Year 6
Who's Magnus? Film 2 (CEOP)	They have fans, we have friends! Film 3	Alright Charlie - Child Sexual Exploitation	Alright Charlie - Child Sexual Exploitation
https://www.ceopeducation.co.uk/8_10/watc	(CEOP)	School Resource (DfE Funded)	School Resource (DfE Funded)
<u>h/</u>	https://www.ceopeducation.co.uk/8_10/watc	https://basisyorkshire.org.uk/resource/alrigh	https://basisyorkshire.org.uk/resource/alrigh
	<u>h/</u>	t-charlie-cse-primary-school-resource/	t-charlie-cse-primary-school-resource/
Check your knowledge:	Check your knowledge:		
Bandrunner	Bandrunner	Check your knowledge/workbook:	Check your knowledge/workbook:
https://www.ceopeducation.co.uk/8_10/	https://www.ceopeducation.co.uk/8_10/	https://basisyorkshire.org.uk/wp-	https://basisyorkshire.org.uk/wp-
		content/uploads/2018/11/Alright-Charlie-YP-	content/uploads/2018/11/Alright-Charlie-YP-
Goldilocks - A cautionary tale about social	Troll Stinks – Online Safety and Cyber	Workbook-21Jan2016.pdf	<u>Workbook-21Jan2016.pdf</u>
media (Jeanne Willis and Tony Ross)	Bullying by Jeanne Willis and Tony Ross		
https://youtu.be/5twTivj7apI	https://youtu.be/3SBidapSdf0		